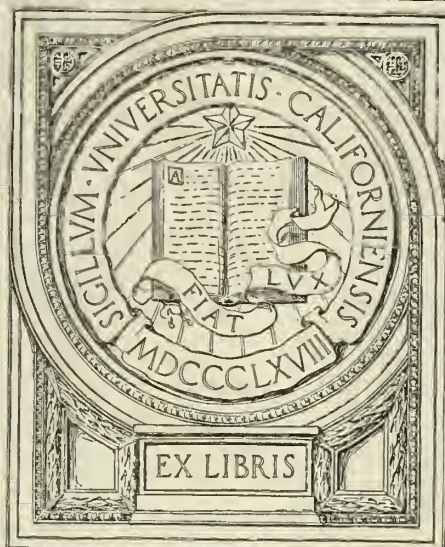




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# THE JOURNAL

OF THE

## MEDICAL SOCIETY OF NEW JERSEY

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PUBLISHED MONTHLY UNDER THE DIRECTION  
OF THE BOARD OF TRUSTEES



Volume XXVIII.

January, 1931--December, 1931

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Publication Committee:  
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# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 1      ORANGE, N. J., JANUARY, 1930

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## DUODENAL STASIS\*

CHARLES FREDERICK BAKER, M.D.,  
Newark, N. J.

Duodenal stasis is undoubtedly much more frequent than was formerly recognized. That it may be the cause of symptoms which we have been prone to lay to diseases of the appendix and gall-bladder is a possibility with which we must reckon, for operations upon those organs do give relief, unless coincidentally the factors producing duodenal stasis are recognized and, so far as possible, corrected.

The causes of duodenal stasis may produce continuous or intermittent effects. Those producing continuous mechanical obstruction and interference with normal duodenal motility may be extrinsic or intrinsic. The extrinsic are peritoneal bands resulting from cholecystitis; anomalies of the pancreas including tumors or annular pancreas; compression by the superior mesenteric or other arteries in the mesenteric root, behind which lies the horizontal portion of the duodenum; gastropnoxis and ptosis of the colon and small intestine. The intrinsic causes include anomalies of duodenum, size and position; ulcer; tumors; etc. Those producing intermittent or temporary stenosis are attributed by some to neuromuscular derangement; by others to superior mesenteric artery compression accompanying right-sided ptosis or ptosis of the small intestine. Conceivably, a drag upon the

mesentery, producing intermittent stasis, may follow periods of atonicity during severe physical and nervous depression, particularly with overloading of a low cecum and consequent increased dragging upon its support; whereas, when, following rest or general relaxation a better tone develops, an improvement would occur.

Ptoxis of the stomach, by a dragging downward of the upper portion of the duodenum, causes an unusual angulation of the upper-third of the descending portion, with stenosis and dilatation. Inflammatory bands, resulting from cholecystitis and periduodenitis following ulcer, as well as anomalous development of the peritoneum or failure of absorption of embryonal peritoneum, affect the lower angle or junction of descending and horizontal portions. Pressure by the superior mesenteric or other branches which leave it or the aorta at about the same level, generally produce dilatation and stenosis in the horizontal portion. Inflammatory bands between the duodenum and jejunum at the duodenojejunal angle are generally the causative factor in stenosis of the ascending portion.

The superior mesenteric artery leaves the aorta above the horizontal portion of the duodenum, which it crosses, and gives off the midcolic, right colic, ileocolic and terminal branches to the small intestine. Many anomalies occur in this as in other anatomic structures.

As stated by Kellogg: "The arterial walls possess little elasticity as compared to the tissues which surround them and when the organs to which the arteries are distributed be-

\*(Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)

come prolapsed, the latter become their chief support and may compress the duodenum. For this reason, prolapse of the small intestine compresses the third duodenal segment, by a direct pull upon the superior mesenteric artery, providing the prolapse is not sufficient to permit the intestines to rest upon the pelvic floor. Prolapse of the cecum drags upon the ileocolic, and through it on the superior mesenteric, causing compression at the same point. With descent of the hepatic flexure, the right colic, when it crosses the duodenum, compresses the second or third segments proximal to the mesenteric root. More than one artery may be involved and (this is important) a combination of arterial compression and congenital or acquired bands is common."

*Symptomatology.* The symptoms are due to the mechanism of obstruction and to the toxemia, which is severe in direct proportion to its proximity to the pylorus. From the obstruction we find nausea or vomiting. The latter may be either spontaneous or forced, to obtain relief, and occurring or produced after a relatively short period following reception of food into the stomach; pain in the upper abdomen, either to the right or left of the median line, and often deep and referred to the back as in cholecystic disease; it may also radiate to the shoulders. The pain may be very severe or there may be complete absence of this symptom. It may be relieved by posture, particularly if a change of position relieves a drag of the prolapsed intestine. These symptoms may be worse when the cecum is over-full and constipation is present. If the compression affects the region of the ampulla of Vater, secondary effects may be present in the liver, with enlargement and increased sensitivity of both liver and gall-bladder.

The toxic effects are more or less of a migraine character; so-called bilious attacks which may have originated in childhood, ushered in by marked constipation and headaches; disturbance of mental processes; severe physical depression; disturbed heart action; poor peripheral circulation; hyper and paresthesias; skin eruptions; subnormal tem-

peratures and blood pressure, most of which are typical of toxemias in general.

Physical examination may reveal unusual tenderness along the course of the duodenum, if it is distended, and a tympanitic note may be found behind the right rectus muscle to the right of and below the pylorus between the liver and transverse colon. Duodenal succussion may be elicited. Pressure may sometimes empty the duodenum and the gas may be heard as it rushes into the jejunum; following which the area of tympany disappears.

The Roentgen-ray examination may easily settle the diagnosis but when the cause lies chiefly in mesenteric compression a negative report is common. The reason for this is that the mechanism may not always operate to produce partial obstruction, with delay in the passage of the barium content through the duodenum, and peristalsis may at the time of the examination be excellent. Improved peristalsis may result from a rest period of a few days or weeks preceding the x-ray examination; or a cathartic the day before may so improve peristalsis that stasis is overcome.

The radiograph may reveal varying degrees of stasis from simple lagging in the flow of the intestinal contents to complete stoppage. The normal current through this organ is so rapid that a true intestinal outline of the duodenum is never seen, unless delay exists. The barium shadows appear as mere flecks disseminated along its course. As the barium mixture distends the dilated duodenum, valvulae conniventes appear, which under ordinary circumstances are generally first recognized in the upper jejunum. Hence, any films showing a distinct intestinal outline, in the regions of the descending or horizontal portions, should at once intrigue us into careful analysis of Roentgen and physical findings and symptomatology, to see if we cannot unravel the mysterious cause of a chronic dyspepsia which may have bothered the patient for a considerable time and for which he may have already been operated upon without relief.

In cases showing greater dilation in the more obstructive lesions, the signs are so apparent that literally one who runs may read

the findings. The duodenum may be 2 or 3 times its normal diameter, and the stomach also dilated. Under the fluoroscope, the duodenum may be seen to writhe in spasm, and waves of reverse peristalsis may be demonstrated. It is held by some that fluoroscopy is the method of choice in detection of this condition. If it is not used many pictures should be made with the patient in different postures, at least the prone, oblique, lateral and vertical.

*Treatment.* Many cases are amenable to the usual measures employed to relieve enteroptosis and intestinal stasis. Surgical measures are indicated when medical fail to relieve. Some are plainly surgical in the beginning, notably those in which the duodenum is greatly dilated or is causing frequent copious regurgitation of bile. Personally, I do not feel that it is pertinent for the roentgenologist to discuss the various surgical measures and will leave that to others.

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## WHAT IS WRONG WITH THE FRACTURE SITUATION\*

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Some well meaning persons suggested that I read a paper on fractures in 15 minutes. This seemed to me a good deal of a contract, and I wrote the Secretary that I really did not think I could do that, but that instead I might make a few remarks on the fracture situation in general, which perhaps might promote a discussion. At any rate, I will promise you one of the shortest papers that was ever read before this society, if you want to call it a paper.

It seems to me that there is something wrong with the fracture situation, and that the greatest trouble lies in the present arrangement of services in our hospitals. I am assuming that it is the earnest desire of each and every one of us who treat these conditions to have the hospital services so arranged that the patients

will get the greatest benefit possible. It seems to me that "rotating" services, where from 2 to 4 different men handle a case, do not give the best results. The responsibility is divided. The problems facing each man as he goes on duty are not as clear cut and well defined as they would be had he handled the case from the beginning. This creates a situation that is distressing to the patient and his relatives, not to mention some of the doctors. A fracture occurring the latter part of the month is often delayed in receiving the attention it should, in order that the man coming on duty the first of the next month can handle it from the beginning; and patients who should have their casts or apparatus removed near the end of a month are often left over to the first of the next month for the man who originally put the cast on to take over the case again. It occurs to me that there is nothing stimulating about such a service. It lacks interest and, frequently, the functional results suffer. The medical profession created this type of service; we created it, and it is up to us to get rid of it. No one else is responsible. It seems time for a change, and it has been changed in many hospitals with very gratifying results. As I see the problem, there are 3 things that can be done:

(1) Have a service called a "Fracture Service", to be under the charge of one man with as many assistants as the work requires. The entire responsibility will be his and all due credit will be his. He cannot pass the buck to anyone. The compensation income from such cases might be divided between the Fracture Service Staff and hospital; that is, if they want to divide it. What you do with the money so derived does not matter much because it amounts to an extremely small sum to any one person. It could very well be spent on equipment, which is not very expensive.

The head of such service should spend at least 2 weeks each year in visiting first class bone clinics, actively studying the manner in which they are treating these cases, and should upon returning read a written report to the staff of his hospital.

(2) If the first method is not cared for, I

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\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 14, 1930.)



suggest the following: Let everyone treat the fractures in the old way, but at the end of the month, when a man goes off duty on everything else, let him continue to treat the fracture patients that he has been treating, and to treat them continuously until they are discharged. This method has the advantage of No. 1 in placing responsibility where it belongs, and it also prevents buck-passing. Further, it prevents men saying their fractures were taken from them.

(3) A "Traumatic Surgery Service" absolutely continuous like No. 1 might be established. This would prevent any quibbling in a case where there is a minor fracture but decided nerve, ligament or muscle injury. There could be no misunderstanding as to whose service the case belonged, and who was to control treatment. It may interest you to know that when the new Physicians' and Surgeons' Hospital was started in New York it was decided to have a fracture service, but that anyone of the staff who wished could, by saying so, treat his proportion of fractures, but he was required to finish every case he started. I am told by the head of the service that since that rule was made only 1 man has asked to treat such a case, and he only asked once.

Is there anyone here who does not believe that a properly organized fracture service by men interested in the subject, and who are continuously working on it, will produce better results than the old rotating type where everyone tries to do everything?

The fracture equipment in many of our hospitals is insufficient or poorly kept. This chaotic state of affairs is often due to the fact that the equipment is not under somebody's special supervision. There may be a closet into which all fracture equipment is thrown; a few old Thomas' splints, some rope and perhaps a few splints bought from some clever salesman by the superintendent but which no one would ever use. Such an assortment and a few very poor Balkan frames may constitute the entire equipment. The reason for this is that no one was really interested in the subject.

A physiotherapy department does not ex-

ist in some hospitals; massage and such trifles are not used, and there is no gymnasium with simple apparatus for restoring function. Much of the required apparatus is very inexpensive and could be made by a hospital carpenter.

The following recommendations, then, occur to me: First, put the fracture service on a sound basis, like the operating room. Make some one absolutely responsible for its proper functioning. Second, put in charge of the equipment some one who will keep it under lock and key, in a place where the apparatus can be properly arranged and where it can be found when needed.

There is an extraordinary impression all over this country, and I guess wherever people have fractures, that the one thing to be accomplished is to get the two ends of a broken bone to grow together. That is not the most important point in treating fractures. I will admit that getting union is a very important detail in treatment of a fracture, there is no question about that, but the patient did not come to you because he had a broken leg—that is not why he came—he came to you because he had pain and loss of the use of his leg. Now, when you have a man with, we will say, a very simple fracture of the tibia, and you have put it in a cast after it has been nicely aligned, and he is lying in bed, you are not treating him, he is treating himself. His fragments are in perfect alignment, he gets nice union, radiograph shows that there is an excellent formation of callus; then you are going to begin to treat him, if you do the right thing. You are ready to go ahead and treat him after he has been lying in bed for 3, 4 or 5 weeks. But in most cases this does not happen. He is discharged after the cast has been removed, and no further treatment is given him. The follow-up service in most hospitals is imperfect. There are a few hospitals of the better class that have a good follow-up service and know what these patients are doing. From one hospital that boasts of its follow-up service I have treated 6 fracture patients who came out within the last 6 weeks, and none of them ever saw the follow-up attendant.

Put the fracture service on a sound basis, gentlemen, like the operating room. Why have you a decent operating room in your hospitals? The Board of Governors did not come to you, nor the Board of Trustees, nor the Executive Committee and say, "we insist on your having the most magnificent equipment that we can force upon you". They did not say that! Oh, no, they did not! You went to them and said, "We can't do the kind of work that has to be done in the hospital unless we have something to do it with". There are no records in your staff minutes in 99% of the hospitals in this country, showing that you have ever intimated to the Board of Trustees that you wanted anything special with which to treat fractures. Go back and read over the books and see when you requested them to furnish you with apparatus that you really could do something with. It is not there.

Now, equipment is a very broad word as applied to treatment of fractures. What do I mean by equipment? I don't mean that your hospital should be supplied with a perfectly stupendous collection of complicated mechanical splints, the last word in the brace-maker's art. That is not what I mean at all. If you have any such collection as that, it is an admission by your staff that they don't know how to treat fractures, and that they are going to use the brains of the brace-maker instead of using their own. The best fracture men that I know have no such apparatus. The other day a bracemaker came into my office with such a perfectly magnificent splint, I mean it was such a perfectly magnificent piece of mechanical excellence for the forearm and wrist, including every joint of the entire hand, wrist and elbow, that it was a mechanical masterpiece. It cost, I think, \$35 or something like that. It was such a splendid and perfect piece of mechanism that, although I have no use for such a thing at all, I almost bought it just to study its mechanics. However, the great trouble with all that kind of thing is that you are fitting the patient to a mechanical appliance. That is not what you want to do. It is the greatest mistake under the sun to do this. When a fellow practices medicine way out in the coun-

try and has no drug-store convenient, he has to keep some medicines on hand, and it is highly proper that he should; but for a man in a big city, that has a large drug-store near the office, it is another thing. It is foolish, when a patient comes to his office, for him to go to his closet saying, "Why, yes, I have just the thing for you". There is no splint, I don't care how expensive it is, how perfectly magnificent from a mechanical standpoint, that cannot be improved upon by a very few dollars worth of plaster of Paris, a little wire and a pruning knife. You can put it in any desired position and make it fit.

What I mean, when I say equipment, is: You do want some Balkan frames, whether metal or wood is up to you; the wooden frames have one very decided objection—they are a perfect nest for vermin. After you have used one for a very long time, destroy it. Make them out of cheap stuff. The vast majority of them don't have to be very heavily constructed. You don't need a Balkan frame made of 2x2 lumber if you are going to treat a fracture of the little finger. One of the very best Balkan frames I ever had was an old bamboo fishing rod that I had used quite often. It was 25 feet long, and it could be tied to the head of the bed, pulled down and tied in the desired position. If you are going to do something in regard to lining up a pelvis and getting the patient's weight off the bed, that is another thing; but you should have in your hospital some type of bed or beds on which the patient's bowels can move without moving the patient in any way. I am not a salesman for the Zimmer Company, but I have not seen any other bed like it for treating fractured hips, pelvises or spines.

You should have a good fracture table in your hospital, and you want somebody in charge of it who knows enough to oil it every day; and you want someone to sharpen the plaster knives every day; and someone who understands the making of plaster bandages, for they are very simply made, and it is a frightful waste of money to buy them. A nurse that knows how to do these things, who has been brought up in the business, and knows how to handle herself in a fracture

room, is an asset. We have one at the hospital for Crippled Children in Newark. She will do a 5 yd. bandage in a minute, and she will do it for an hour without the slightest trouble.

You need Balkan frames. If you are going to use the metal ones, let me caution you against having an electrocution. They are splendid frames, they are absolutely vermin-proof, but there are situations—unless you keep the point in mind—where you may get your high-tension line a little too near the metal, and cause trouble.

That is all the equipment you need. It does not cost much. Of course, you should have physiotherapy, but don't have to have any gorgeous display. Massage is necessary. You want some diathermy. Those are the 2 main things you need, and if you have them you can go a very long way.

## RELATION OF TRAUMATIC SURGERY TO INDUSTRY\*

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Many interesting problems are arising between industry and our profession; especially is this true with traumatic surgery. These problems are interesting because they deal with facts facing our profession today and which we must solve.

The date of conception of "industrial surgery" is unknown; its birth was unheralded and its growth unnoticed, *until* the compensation laws went into effect. The British Parliament passed its Workmen's Compensation Act in 1897. This attracted the attention of men in the United States who were interested in labor problems; and while several acts were passed here which did not meet constitutional requirements, it was not until 1911 that the legislatures of Wisconsin and New Jersey passed compensative laws of an effective form. Since that time all the states except

South Carolina, Florida, Mississippi and Arkansas have adopted compensation laws; and while there is a great variance in their interpretation, it is the intention of all of these laws to protect injured workmen and industry as well.

Since the various compensation laws went into effect, the attention of the medical profession has been aroused because the laws provide for the collection of accounts for services rendered. This caused a competition among doctors for the business and has had a tendency to commercialize this branch of surgery, with the result that the greater part of this work has been thrown into the hands of medical men who possess more business sense than professional ability; and industry has found that for the interests of all concerned it is necessary to endeavor to place injured employees under the care of competent surgeons and to establish control of all matters of a medical and surgical nature. Consequently, there must come a complete and definite understanding of this economic problem by industry, by commissioners of labor, by labor organizations, and by the medical profession. Our profession is faced with the responsibility of giving to injured workmen efficient service at a reasonable price, and has for its reward the saving of human wastage and the avoidance of unnecessary deformities, which mean so much to the injured, to say nothing of the time saved and the large percentage of disability avoided. The indiscriminate use of doctors means not only poor end-results or prolonged disabilities for the injured, but it is costly to industry.

The general handling of industrial surgery requires more than surgical knowledge; it requires an interest in the work from the standpoint of the employer, the employee and the insurance carrier. The surgeon should be able to make to the insurance carrier and to the Commissioner of Labor true and firm statements of a disability, without fear or favor. A man might be a foremost surgeon in his community but if he does not coöperate in the proper handling of compensation cases, he will be practically worthless as a surgeon for industry. It is a very hopeful sign that the

\* (Delivered at the 164th Annual Meeting of the Medical Society of New Jersey, held at Atlantic City, June 13, 1930.)



best surgeons are beginning to give more of their attention to surgery of the injured, which means of course that the claimants under compensation laws will receive a superior class of service in the future. There are still many weak points in the surgical treatment of compensation cases.

Our profession is going through a very close investigation by industry because our end-results in the treatment of injured workmen have not been satisfactory from an economic standpoint; and if they have not been satisfactory from an economic standpoint, they have not been satisfactory from a humane one, because these go hand in hand. Good surgical results produce good economic results. Our profession is on the witness stand, as it were, and industry is asking: "Why does the same kind of a case show good results and small expense in the hands of one physician, and poor results and great expense in the hands of another?" "Why do some cases require many office treatments and a great amount of physiotherapy, while the same kind of cases respond to fewer treatments and no physiotherapy in the hands of another?"

Thousands of dollars are being paid for hernias which, as the result of accident during the course of employment, have never existed. To illustrate, a man was acting as a watchman and was being heckled by some children. The history of the case states that he jumped from behind a shed and said "Boo", causing him to have a *double hernia*; and our organization was ordered to pay out more than \$300 in hospital and surgical charges. The tendency to do open operations when not indicated, cases of so-called traumatic appendicitis, and most interesting examples of sacro-iliac subluxation which have Smith-Peterson or other fixation operations performed, would fill a book and take all day to talk about. Hospitals are authorized to put injured employees in private rooms when not necessary, to assign special nurses, and to take x-ray pictures out of all reason. To illustrate, a case was sent to a hospital with a clinical history of a possible fracture of a rib; radiographs were taken of skull, spine, and chest, the cost amounting to \$75.

Much of the chaos found in the field of traumatic surgery is due to the wide variance of opinion; and industry is asking why. When a person is given to several physicians to be examined, so that a true statement of the man's condition can be obtained, the reports will show variations anywhere from practically no disability to almost total disability. No wonder Commissions of Labor have a tendency to ignore our recommendations and form opinions of their own! I firmly believe that every injured workman should be given a liberal allowance for a disabling injury; at the same time, if we are to be responsible for the proper interpretations of those disabilities, our decisions should be made with a fair mind and a mature judgment.

The term "aggravation of a preëxisting condition" is not thoroughly understood by the laity and is capable of many interpretations. Shrewd lawyers have taken advantage of this fact, and as a result this term is frequently encountered in the trial of cases which cannot stand on their own merits. For example, instead of syphilis causing delayed union of a fracture, it is claimed the accident aggravated the syphilitic condition; instead of rest in bed, following a back injury, improving the heart in a mitral insufficiency, it is frequently argued that the general devitalization of the body tissue as a result of the accident has aggravated the heart condition which existed prior to the accident. This phrase also benefits the malingerer; we may be morally certain that the patient is not as disabled as he claims, but the Court says the burden of proof rests upon us. Unfortunately, the malingerer is usually able to find *some physician* who is willing to support his claim; as a result there is the usual difference in professional opinion, the Court becomes bewildered when it finds 2 exactly opposite interpretations of the issue, and the general public becomes convinced that the medical profession wears its dignity merely to camouflage its ignorance; for disagreement is always interpreted as ignorance. Unless our profession confines itself to facts and accepted principles rather than the competitive juggling of

theories and possibilities, our opinions will be little heeded and we will lose the respect of the public.

However, the poor end-results being obtained for the injured workmen present our greatest problem. Much of this is due to the carelessness and indifference with which a large part of our profession regards compensation cases. Men who lack special training will attempt to handle injuries coming under the compensation law which they would be afraid to treat in their own private practice. A doctor should know his *limitations* and should be conscientious enough to immediately call a consultant, specially trained, just as he would in his own private work; for we all know what procrastination means. As Scudder said in his oration on fractures: "By treating a fracture instantly, you treat the fracture; by treating the fracture after delay you treat complications. Early treatment is easy, delayed treatment is difficult and dangerous, late treatment is lamentable."

During the past year we have also found many cases in which there has been improper treatment of simple wounds. The principles of proper dressings have been neglected. Ointments have been used on clean lacerations, making a clean wound infected. Suppurating wounds have been sealed by tight, dry, bandages. Anti-tetanus serum has been neglected. Indifferent treatment has been given fractured fingers and toes, causing unnecessary disabilities and deformities. Injuries to soft parts, such as nerve injuries and the cardinal symptoms of acute abdominal conditions, have not been recognized. During the past year we have had several cases in which proper diagnosis of a severed median or ulnar nerve was not made. To my knowledge there have been 4 cases of "acute abdomen" where the patient's life might have been saved if proper diagnosis had been made and immediate action taken.

We cannot help but realize that the chief failure in our treatment of industrial injuries comes from indifference, incompetence, and delay; and the solution lies in doing honest, efficient work. It is no longer considered economy to organize a staff of surgeons on

a basis of low fees. There is a sincere desire to give to the industrially injured the highest grade of surgical care that can be secured. Personally, I am not interested in fee schedules; but I am interested in seeing that proper and efficient work is being done. For if we are doing honest work, then that work should be paid for by industry in proportion to what the injured workman could pay if he were a private patient. Industry should and will pay for such service, regardless of fee schedules or limits of compensation laws; for naturally if good work is done for the injured, the amount of disability is lessened and industry and insurance carriers profit by it.

I will welcome the day when every state in the union will provide for unlimited medical attention in its compensation law, with proper surgical supervision, and when there will be appointed to every Commission of Labor outstanding medical men to act in an advisory capacity without fear or favor in connection with the care of the injured, the estimating of disabilities, and the disposition of controverted bills. I am happy to state that the best men of our profession are interested in the solution of this problem. None of us wants to see future medicine controlled by state laws; and as our profession in the past has been respected and honored for its high ideals, I am sure that industry, Commissions of Labor and the public will not be mistaken in the confidence placed in us to solve this economic problem.

#### DISCUSSION

*Dr. John E. Towe* (Arlington): It strikes me that fracture work has become a highly specialized specialty and calls for a great deal of time. It calls for more time and more patience than the average general surgeon has to put into it. The average general surgeon looks for results and wants them quickly. He has been trained to action. He has not been trained to wait. The average fracture man, or bone surgeon, or orthopedist is trained to wait and take an abundance of time. For that reason I think the hospital's fracture service should be a distinct and separate service, not because the *rotating* service is all wrong, but because of the time a man may be willing to put into it. As Dr. Adams has said, when you have put the bones to something near apposition, you have still done practically nothing to rehabilitate that man, and the object of fracture treatment is to get that man back on a wage-earning basis as nearly as possible to that which he enjoyed before. There is where time comes in. It is easy enough to put fixation on and wait for



the bone to heal; but then your time, your patience and your ingenuity are called upon to put that man back on a wage-earning basis.

Just a word about physiotherapy: Until the general surgeon, who is doing fracture work, or doing industrial surgery or traumatic surgery, as you choose, follows it up as a thing worth while, physiotherapy is in danger of coming into disrepute and falling into the hands of charlatans. It is in disrepute now; there is no question about that. Many people will say, "I have a lamp, I can take care of that at home", which is utter rot. Of course, use of heat is a means to an end, but your massage and your constant follow-up are the means of rehabilitation of the injured man.

I would like to follow Dr. Martin with a word. This is apparently going to be a "panning" party anyhow, and just now I am going to "pan" industry, or the insurance companies through industry. Dr. Martin said that industry is willing to pay. In my observation industry has not been willing to pay. It has delegated responsibility for the injured workman to the insurance companies, and the insurance companies have, by hook or by crook, gotten rid of doing the best possible because they won't pay the price. It is axiomatic that you cannot get something for nothing. A man who is doing special work, good conscientious work, and attempting to rehabilitate injured workmen, is not going to work for the fees which they attempt to dictate. It is not at all unusual for me to have a letter back from an insurance company, after I have presented a bill, stating that "our fee is—thus and so for this type of treatment", but that fee isn't my fee; I can't do that type of work at that price, and until the insurance company is willing to recognize that it has to pay for competent men—and it has to have competent men to rehabilitate the injured workmen—it is my contention that industry is not willing to pay.

*Dr. E. P. Weigel (Plainfield):* I think both Dr. Adams and Dr. Martin have opened for discussion a subject which is rapidly becoming more acute to all of us who engage from time to time in the treatment of orthopedic or traumatic cases. As Dr. Adams stated, the assignment of fracture cases in a general hospital service has been a matter of considerable concern to all of us. From the very nature of the case, it is inconsistent to expect that the general surgeon shall be equally adept and interested in fracture work. The fracture problem is becoming entirely different from the straight surgical service. I think in many hospitals it has been assigned to the orthopedic service because it more closely fits into the work than it does into the general surgeon's work. Many of the smaller hospitals throughout the country have been unable in the past to support an orthopedic service because there were not enough cases of a straight orthopedic nature to warrant such a service. The usual orthopedic deformities were not in themselves large enough in number to enlist the services of a man who did orthopedic work. However, many of our smaller hospitals are today adopting a wise policy by putting the fracture service along with the orthopedic service, which enables them to maintain an adequate staff for this kind of work. I know in several of the hospitals in which I do the fracture work, we frequently have as many patients, particularly on the male ward, as the general surgeons do. We have in 2 of these institutions now adopted the principle which the doctor has suggested here of the man who first starts the treatment of a fracture case seeing that case through. I do not think

it is at all fair to turn it over at the end of 1 month or 3 months to another man, who possibly entirely disagrees with the treatment the first man started. I was impressed recently by a Fracture Symposium, which I attended at one of the American College of Surgeons' meetings, to see how few of the most prominent authorities agreed on the methods of treatment of ordinary fracture cases.

I think this brings out just one point: It is impossible to standardize the type of treatment of any given fracture. Frequently hospital superintendents buy fracture equipment because it has been advertised as the type used by some prominent man, and then attempt to fit their cases to it. This is never entirely satisfactory. Every man has to use the type of treatment which in his hands has proved most successful. We all know that certain surgeons throughout the country have brought out operative methods for treatment of conditions which in their hands are successful, but it is impossible always to teach those methods to men of lesser experience and lesser surgical skill, probably with equipment they do not know how to use. I distinctly remember a position I held at the Post-Graduate Hospital in New York where I taught operative orthopedics on the cadaver. One of the instruments that we used was the motor saw that Dr. Albee devised, and the doctors who had come from all over the country to take a 6 weeks' course were taught the use of that motor saw. Some of the men used it well; they were mechanical by nature. But I also remember the difficulty encountered by others.

I don't believe we are ever going to be able to standardize the treatment of fractures. A man has to use that method which in his hands gives the best results, providing he has been well trained and takes the opportunity to acquaint himself with the new ideas and new methods of men of reputation. I don't think it is ever fair for that reason to turn a case, the treatment of which has been started by one man, over to another before that treatment has been finished.

In reference to Dr. Martin's remarks about insurance companies being willing to pay for good treatment, I think there are 2 sides to it. I have been told from time to time by some of the responsible men in insurance companies: "Doctor, we want good work. We are willing to pay for good work, and if good work is rendered we will see that you are amply compensated for it." I believe this is the attitude of the better companies. However, there are many claim agents who feel they must "shop" in medicine as they would for ordinary commodities and are still looking for cheap treatment regardless of quality. I do work for some companies that never question the bills; they want good service and seem to think we are giving them good service, and are satisfied with our bills. However, we are constantly receiving letters from some companies requesting reductions of bills, objecting to the charge which we have made, when that charge is what we have adopted as standard for the same type of treatment. My experience has been that some companies, as Dr. Toye brought out, still want cheap work. They do not realize that they are paying a great deal more in the end than they would be by hiring a man who makes it his business to render better service, even though at an increased initial cost. I believe most companies, sooner or later, find out the men who are competent, and are willing to pay them a fair price for their services.

*Dr. John F. Hagerty (Newark):* I think if any argument were needed to prove the truth of what

Dr. Adams has said, it has been supplied by the pictures shown by Dr. Martin, that fractures ordinarily are not properly cared for.

In St. Michael's Hospital until 7 years ago the fractures were taken care of by the general surgeon, and, as has been well expressed here today, the general surgeon has not the temperament for taking care of fractures. Accustomed as he is to dealing with acute illnesses and acute infections, the general surgeon has not the temperament to care for patients whose care lasts over a very long time, nor has the average surgeon the mechanical skill required. I think it requires a peculiar type of ability to care properly for fractures, and that ordinarily is not possessed by the general surgeon. We decided, therefore, in St. Michael's 7 years ago, to set up a special fracture service, and there all of the fractures that are admitted to the hospital are admitted to the care of one man, Dr. Fort, who has a group of assistants, and who cares for them properly.

As has been well pointed out, in the old days sometimes a fracture would be admitted at the close of the morning, after the surgeon had spent an arduous period operating, and he would direct somebody to see that the patient received temporary care and he would look after it later; whereas, quoting from Dr. Martin, when a fracture is cared for immediately it becomes a very simple thing and easy to take care of.

*Dr. Frank W. Pinneo (Newark):* Dr. Adams has shown that fractures for treatment, form one, distinct, group in medicine. That brings out 2 things: the fundamental principle of undivided responsibility, and yet, at the same time, the need of coöperation. Now the fear that many doctors have of fractures should not result in inadequate care of the patient nor, on the other hand, in the mistakes of the patient's care shifting from one to another service.

The demonstration that Dr. Martin has given follows up Dr. Adams admirably, and some of his remarks recall to mind what Sir Robert Jones told us in the armies, that the orthopedist must "work for function from the start". This is contrary to the conception that all a patient needs at first is treatment for his infection, and, after that, he can be made over again, to improve, or save from further, deformity, it being rather implied that his fracture, or other injuries, must necessarily involve some deformity, whereas proper treatment from the start would prevent deformity.

As to the relation between industry and our profession, I do not see why there should be a disagreement when both parties are aiming for the same end-result. We must admit that frequently the operation of the law is very faulty in substituting the interest of the insurance company for the professional skill necessary.

*Dr. William J. Arlitz (Hoboken):* I don't know that I can add anything to what has already been said. The remarks of the gentleman "that insurance companies are not willing to pay" is, I think, far-fetched. There are a number of men in the room who are specializing, and whom I have called upon on various occasions to offer their best judgment and treatment in cases. The insurance companies were always willing to pay for proper services. They do want capable men to treat and examine their cases.

In the Compensation Bureaus we see the end-results of fractures that have been treated by the ordinary surgeon and by the orthopedist. I do not consider the orthopedist more capable than the

general surgeon. When I say "general surgeon", I mean a man who is a recognized visiting surgeon at a good hospital and who is experienced. Such surgeons usually get good results. Poor results are those where the fractures are treated by men who have had little surgical experience. They all have a method of their own. Most of their methods are not good; but in the final analysis, the visiting surgeon at a hospital gets as good a result as the orthopedist. They both get good results.

I know that the railroad companies—and I represent quite a number of them—are always willing to pay for good service. The insurance companies, likewise, are always willing to pay for good service. They do object to huge bills for the treatment of minor injuries—large bills are not unusual.

We have been criticizing the results in traumatic surgery for a great many years. I don't think that our criticism has brought about any great improvement in methods. I don't know how you are going to bring these about.

Dr. Martin was talking about the "aggravation of a preëxisting condition", after trauma. The majority of you would be amazed if you went into a Compensation Bureau and heard these various alleged accentuations. There are a number of men here now, who have been associated with me in the defense of such cases. A man will have a small burn of the foot, and a troupe of doctors will come in, and they will allege that this man is now suffering with advanced tuberculosis as a result of that burn of the foot. Another man will have a troupe of doctors come in and say that the man is suffering with a gastric ulcer as a result of a contusion of the foot. They claim all types of aggravations and accentuations after minor injuries. I don't know how you are going to put a stop to it. I know many members of the County Societies and members of the State Societies, who make these allegations. It would not be good judgment to say that all doctors who make these allegations are liars, because sometimes trauma does produce aggravation of a preëxisting condition. A frank expression of opinion in many of these cases would not look good in the record of the case. Aggravation is so frequently claimed that I usually request that a specialist examine such cases in consultation. The specialist is, of course, one who has a special knowledge of the particular allegation. These aggravations are alleged year in and year out. I have devoted many years to these problems, but I am frank to say that with all of my experience I am unable to offer any solution for these perplexing problems.

*Dr. J. Bennett Morrison (Newark):* At this time I am going to ask you to recall the paper I read to you on Wednesday morning—on industrial medicine. I ask you to recall the plea that was made for an extended coöperation between the medical profession and the carriers in a effort to produce better results, better after-results in the treatment of the laborers in the state of New Jersey. I told you that some of the carriers were anxious to clean house and were coming to us begging for our assistance to raise the standard of surgical ability of the men who are treating those cases. I told you that some of the carriers were willing to pay your bills as rendered if it be proved that you are reputable men; that they reserved to themselves only the privilege of referring bills which they thought excessive to those committees in the state of New Jersey which we have provided



to pass upon questionable bills; and I told you that they stated that they always paid the bill after our committee passed upon it. I can tell you instances in the state of New Jersey where insurance companies have paid single bills up to \$1000 for surgical procedures, one bill of \$1200.

We have taken this opportunity to bring to you this morning the Medical Director of one of the largest carriers in the United States. Bring him upon the floor here, treat him as you would any other speaker. Here is your opportunity to find out about the relation of your work to the compensation work. Let us ask him if the carriers have an association where the better class of carriers can induce the poorer class of carriers to try and elevate their work?

I am very glad indeed that the doctor showed us that series of pictures. I have been practicing medicine and surgery for the past 30 years. I do not believe there is a man in this audience, be he specialist or general practitioner, who ever had the results that were shown to us this morning. Those results are a condemnation of the class of men that the carriers pay to take care of industrial medicine. That is the class of work that is a reflection of the very men who are discrediting industrial medicine. That is the class of men who do the cheap work that some of the carriers want to get away from. Those pictures show in themselves that the carriers have paid on that series of cases alone probably \$100,000 more in prolonged disability and total disability than they would have paid had they employed the average competent surgeon to take care of their work.

Here is an opportunity for the carriers to tell us what class of work they want, ask our co-operation in securing that better class of work, and assure us that they are interested in it and are going to pay for it when the time comes. We all know that industrial medicine is here to stay. We all know the type of men who are engaged in it. We all know the better class surgeons have been discouraged because of the number of times they are called to court, because of the question of their bills, and because of the unsatisfactory relations between them and the carriers.

Now, for the next 100 years we must keep pushing our attempts to get a closer coöperation between the medical profession and the carriers. There may be faults on both sides, but the greater portion of the fault, as we can see it, is from the carriers' side. Here is an opportunity to question this man, and here is an opportunity for him to lay his cards on the table and tell us what he wants us to do in order to better this condition.

*Dr. Maurice S. Avidan (Newark):* I have been associated with the State Department of Labor for several years and, having had the opportunity to review a large volume of this work, I should like to present certain facts. In the first place, the type of fracture and other industrial work that is being done in this state at the present time is far better than it has ever been before. This includes the work from the general profession at large. One reason why the work has made such an improvement is because of the fact that there has been created a very important department relative to industry, which is a sort of clearing house for all industrial work, called the Compensation Bureau, through which medium a check-up can be made of the character of work of each man engaged in the practice of industrial surgery. Each case of any importance must pass through this Bureau and its functional end-results are

made a record and evaluated. This is done by careful studying of each case from purely a medical and surgical standpoint, including clinical, pathologic, x-ray findings and prognosis as to function. Consultations and conferences in the more serious cases have been of great value in determining this factor. A public record is made of each case.

I have always felt that the fracture work should not be taken away from the general surgeon. I have seen some very good results among the general practitioners and have also seen some very poor results among the industrial and bone specialists. I think that the general practitioner who is conscientious and who knows his limitations is very capable of handling this class of work. I also think that some of our bone specialists are at times a little over zealous and often too radical, especially in the open operative field.

After all, industry demands good functional results with the least amount of lost time. Dr. Martin demonstrated some very poor results in fracture work. I do not think that is the type of work that is found in New Jersey; and if some of these poor results should be found, then industry and the insurance carriers should have no complaint, because they have full control of the medical situation, as to choice of doctor in each particular case. They have taken advantage of that right under the Act and have been given full sway in making their choice. Dr. Martin stated that in his opinion there should be no question about the payment of medical bills if the work is properly done. Dr. Martin represents one of the largest insurance companies in the country and it is very gratifying to the medical profession to know this. From my experience I believe 99% of the insurance companies have co-operated and have done fairly well, everything being taken into consideration. They frequently come to the State Department for suggestions and advice concerning special treatment. Therefore, I don't think that they ought to be unnecessarily criticized. However, a few of the companies in the last few years have tried to take advantage of some of the doctors; but in the long run they have not succeeded. Quite often the doctors have had grounds for criticism, but in the large majority of instances it was due to misunderstanding.

One of the greatest problems we have to deal with in this state, and one which cannot so easily be solved, is the question of expert medical testimony in compensation cases. As Dr. Martin stated, one expert will state that a man has 10% loss of function of a limb and another will state he has 80% loss of function. In these instances we are compelled to resort to courts and to have laymen decide questions that are purely medical in nature. It has become a serious problem because it puts the medical profession on the defensive and very often in a very embarrassing position. There are members of the medical profession who make a specialty and have no other form of practice than giving expert opinions on disabilities in courts. There has been an attempt to overcome part of this perplexing problem by urging medical conferences and consultations; which in many instances have proved successful, especially where there was wide difference of opinion.

*Dr. Henry H. Kessler:* I just want to add a little note of optimism and sort of second the statement just made by Dr. Avidan. About 10 years ago we used to see those same results which you saw on the screen a few moments ago; but fortunately we do not see them now. I am quite

sure there has been a marked improvement in the end-results of the treatment of fractures, both by the orthopedist and by the general surgeon. However, I do think we should aim toward a definite goal regarding the general relationship between the carriers, industry and the medical profession. I feel there has always been a spirit of conciliation between the various groups. Today, at least in the northern part of this state, we do not see industrial surgery or traumatic surgery in the hands of a very few. There has been a tendency on the part of carriers and industry as a whole to distribute the work rather evenly among the general practitioners and surgeons.

As a general rule, the bills that come from competent men, men who are on the surgical staffs of recognized hospitals, are rarely questioned. Then, of course, we have a different set-up, of which I will tell you this afternoon which helps in the adjustment of medical differences.

I would like to see a special fracture service in hospitals. I am in accord with the previous speakers on the subject. At the same time there is still room and still an opportunity for the general surgeon who is interested in fracture work to get aboard the bandwagon. No better instance can be pointed out than the fracture service at the Massachusetts General Hospital. There you see orthopedic surgeons and general surgeons co-operating in performing some of the finest fracture work in the country.

*Dr. J. K. Adams:* First, Mr. President, I did not mean to state—I don't think I did state—that I wished any differentiation whatever in the treatment of fractures by general surgeons or by orthopedists. If Dr. Arlitz understood me to say that, if he thought I said the fracture services were not properly handled by general surgeons, he is mistaken. What I stated was that there should be a fracture service established, that is, that the rotating type of service should be abolished. You could call it a "traumatic service", or a "fracture service", or you could call it any kind of service you wanted to; but I have made no differentiation whatever between general surgeons and orthopedists. I even went further, I said let anybody treat the fractures who wants to treat them, but make someone responsible.

When Dr. Hitchcock presented his paper on this subject, which was the most illuminating I have ever heard or expect ever to hear, he distinctly ended his argument by stating that if he had a severe, compound, infected fracture of the femur, or any other long bone, he would rather be treated by a good, earnest conscientious man who understood the principles of what he was doing than by the 3 greatest stars who ever lived; and what he was referring to was the rotating service. That is my point. In this fracture business we go through fads. We do things because it is the style. You will remember that about 20 years ago we were going along in the same old routine way when Arbuthnot Lane, of England, made a visit to America. He was the master of a perfectly extraordinary technic in the application of medical plates to bones; the result of years and years of extensive study and splendid concentration; a technic that was impossible for the average man ever to approach. Within 6 weeks after he arrived, the steel mills were busy turning out plates to put on broken bones; and some of the results were perfectly frightful. Not only were these plates put on patients who did not in any sense require them, and who could have been treated by a closed method perfectly well, but it

was the style to use steel plates—and the Lord knows they were used in America, there is no question about that.

Now, as to what Dr. Toye said about the general surgeon being unwilling to wait, or not being trained to wait, and what he said about the orthopedist being more or less trained to wait is, I think, true in a certain sense. The orthopedist has naturally been forced into a waiting attitude as the result of a great deal of bone pathology that has come under his attention, such as tuberculous spines, and tendon transplantations followed by long periods of muscular education. I think that is true. It is natural for a man who has been brought up to play cricket in England to spend 3 days playing a game; while in America we want to see a ball game in an hour and a half. We are not accustomed to have a man go to the bat and take 3, 4 or 5 hours to make 150 runs; we expect him to do something right away, either strike out or get on first base.

In regard to this insurance company proposition: we all have had our experiences from which to form our opinions. Naturally, the opinion we have is the result of our experiences. If you have sent 150 bills to insurance companies in a certain length of time, and every insurance company has sat down and sent you a check promptly, you do not feel that there is anything to complain about; but when a great many insurance companies on a great many different occasions refuse to pay your bills, why then you don't feel that insurance companies have exactly rushed forward with money. That is the point.

I have had some of those experiences, I must admit. I even had an instance where an insurance company wrote me that my bill was too low, and sent me a check for a higher figure. But that was only one instance! (Laughter.) I think I sent them a bill for \$25, and they thought the result was very nice indeed, and that I had undercharged, and sent me a check for \$50; but that isn't a daily occurrence. That is what I want to bring out.

Now, these are exact facts, and there are men here who can back me up on them. My experience has been somewhat like the experience of Dr. Toye. A man was struck on the back by a heavy hoist that was lifting a large stone. He was completely paralyzed below the waist. He was brought into the hospital. A careful examination was made and it was found that he was totally paralyzed below the point of fracture, which roughly was somewhere around the first lumbar vertebra. He had absolutely no control of the bladder and no rectal control; no sensation whatever below the waist. He was in very decided pain. I was asked to see him by the physician for the company for which this man had worked. He told me that he wanted me to see the man, and he wanted me to suggest a treatment to have carried out, that he would be prepared to assist in carrying it out, and if he was not able to do it alone would get some one to assist him, and that he had authority from his company to ask me to see the man. I saw the man. We made the examinations, we x-rayed him, and found he had a fractured spine, naturally. It was not quite so bad as we had thought. This man was put up with a head apparatus with traction on it, and with traction on his feet also. He did not do well. I saw the representative of the company, who was an executive of that company, in that hospital with a great many of this man's relatives and friends within a few days, and they wanted to know what I thought about his condition, and I told them very plainly that I thought the man was very



seriously injured, that I did not think that he would ever walk again, and I questioned whether he would live. Well, that was discouraging, of course. Now, this accident, while I will not say that it was absolutely the fault of this company, I know that the company felt that it was a little to blame because the representative told me so, or intimated that it had not taken the safeguards that it should have taken to prevent that accident. The representative asked me if I would mind having someone else see this man in consultation with me. I said: "Certainly not. Have you anybody in mind? You can have anybody that you want see this man, anybody that you think can be of service or of the slightest assistance." In the course of the conversation the name of Dr. Albee, of New York, was suggested as a proper person to come and see this man in regard to what the probable outcome of the case would be and as to what the treatment should be, the subsequent treatment. Dr. Albee said he would be very glad to come, and he did. He made a very thorough and careful examination of the man, and said he had nothing whatever to suggest in regard to the future treatment. He said he would come again in 6 weeks and see the man and ascertain whether he was doing well, and that the advisability of what should be done would, of course, depend on what the examination revealed at that time. Now, I saw this man 5 or 6 times, went a considerable distance from where I live to see him, and he was being taken care of daily by the physician of this company and another physician had been called in to assist him. He had a number of radiographs, and his board was being paid in the hospital by this company. At the end of about 3 weeks the man died, and the physician who treated this man sent in his bill. It was a larger bill than mine, very much. It was paid. The other physician who assisted him sent in his bill. That was paid. The x-rays were paid for. The hospital was paid. Dr. Albee was said to have been paid, and I think he was; at least this man said so. I sent this representative a bill for \$100. As I said, the patient was seen by me 5 or 6 times, and I went an appreciable distance to see him. I did see other cases when I was there on most occasions, but on 1 or 2 occasions I went up there just to see him. I got a letter back from the insurance company saying: "We don't see why we should pay your bill. We would like you to write a letter in explanation of your bill and send it to the State Department of Labor and explain why you have sent us this bill." The executive of this company who saw this patient with me, and who saw him in the presence of his relatives, stated in the presence of these relatives that there was no expense whatever that this company would not pay to put the patient on his feet again if it was humanly possible. I wrote Dr. Avidan a letter about this matter and asked him what to do about it. He replied that he would be very glad to take it up, that he would write to the insurance company, but he said, "We have no authority to make them pay, but I will be very glad to write a letter for you and see what can be done in the matter". Have they paid? No, they have not, and I don't suppose they ever will unless I sue them. Now, when you tell me that insurance companies are always glad to pay, do you wonder why I disagree with you?

*Dr. J. W. Martin:* I did not know I was going to get into a commercial argument here today. I am not going to hold any brief for insurance companies. Up until a year ago I had the pleasure of being a doctor myself. It is true that in-

surance companies do have claim departments which try to get you down to the last cent. I did this work until a year ago, and I was tremendously interested in traumatic surgery. I will have to tell a little about myself. I know how the medical men do not get together as a unit, but act as individuals, and the one fellow fights the other, and how the Claim Departments, if they can, will whip you down a dollar. So, when I went into this Department, I said, "We are not going to have any fee schedule, and the Medical Department is going to run as a separate unit, not connected with the organization". And that is true as far as this company is concerned, and that is all I am interested in.

If men will charge a reasonable fee, or charge the insurance companies what they would charge in that case were it a private patient, insurance companies would pay for it, and they would pay for it without any trouble, and they would pay a whole lot more than would a private individual because a private individual could not afford to pay the economic value that the insurance company could. They are dealing in dollars and cents; but it so happens if they deal in dollars and cents, we are dealing with the human side of it, and the two go hand in hand, as I tried to bring out in my paper.

Now, these end-results—they were not from New Jersey, but they were from different states in the Union. I do not think, Gentlemen, from looking over the files and records in the United States, we are doing good work. It is not because we do not know better; we are indifferent to it.

It is up to you to get behind this thing and say to the insurance companies: "We are going to give you the best there is, and you are going to pay for it."

*Dr. Weigel (Plainfield):* May I ask Dr. Martin just one question? He has said in his rebuttal, as it were, that if the doctors would charge the insurance company for the treatment of cases what they would charge ordinarily to individuals if the individual was to pay the bill himself, the insurance company would very gladly pay that much or possibly more. Now, it is my understanding of the average compensation law that it was put into effect for the very reason of giving that man some compensation and paying for his treatment because he was injured while in the employ of whoever happened to have hired him. I think everyone of us feel that if these men were injured when not working for the company employing them, they would all be *charity patients* on the ward service. Invariably, these laborers are the heads of large families, who can't pay a single thing for their treatment. The same man if he is injured after his work on his way home, for instance, by an automobile, pays the doctor absolutely nothing for his services; and it seems to me that if the insurance companies are going to tell us that we should charge for these services just as we would charge him as a private individual, we would have to treat every case for nothing.

*Dr. J. W. Martin:* I don't know how to make myself clear, but I don't see how I can make it any plainer than this: What is going to be the ordinary charge for a broken femur for a man who is working at \$4.50 per day; and, we will say, who has a family to support? You say he goes into the ward and you don't get anything. Well, I imagine that \$150 or \$200 would be a good price under those circumstances.

*Dr. Weigel* (Plainfield): Yes, but the man could not pay that.

*Dr. J. W. Martin*: But the insurance company would pay you.

Now, as far as the compensation law is concerned, I tried to bring out in my remarks that I would welcome the day when a universal compensation law was adopted. Down in some of the Southern States, for instance, a man has a broken leg. The compensation law says \$100. Well, how long does that last? As long as a snowball in some place. The fellow has still the fractured leg, and it must be taken care of. Industry must be philanthropic, because if they let that leg go improperly cared for, then they are going to have a tremendous amount of disability; therefore, they cannot recognize your compensation law, they have to pay several hundreds of dollars for the care of the case, and willingly do it because if they get a good result it is cheaper for them. However, our troubles are we don't know what charges we are to make. I think that is the trouble. One of us might think that our time is worth a whole lot of money. Well, if it is, then don't fool around with this sort of work; but if you can take it in along with your practice in a general way, and get a general fee for it, all well and good.

I will say frankly, from a commercial standpoint, for every dollar that this company takes in—and I believe it is the same way with all companies—they are spending \$1.50, so they are not making any money on it. My Department alone spent \$2,000,000 to the medical profession of the United States, and, therefore, I believe that the insurance companies are giving a little money to the profession.

*Chairman McBride*: We have had a very splendid morning. These papers have all been very worth while, and I want to thank at this time the speakers who presented them, also the discussants. It has been very illuminating, and I believe we have gained knowledge by their presentation and discussion.

## GASTRO-INTESTINAL DISORDERS IN RELATION TO DEFECTIVE GASTRO-INTESTINAL MECHANICS\*

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That gastro-intestinal disorders of widely varying types may be occasioned by faulty structural gastro-intestinal relations in the adult has been known for years. It has been known that displacements, dilatations, angulations and peritoneal bands have a pronounced effect upon function; that similar

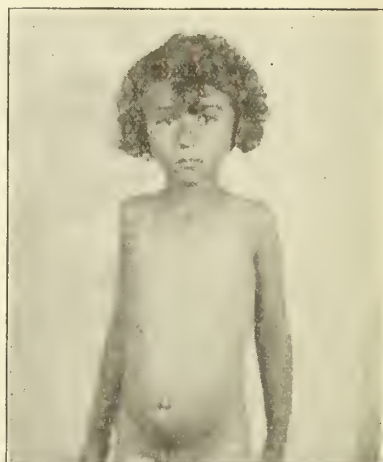


Fig. 1.

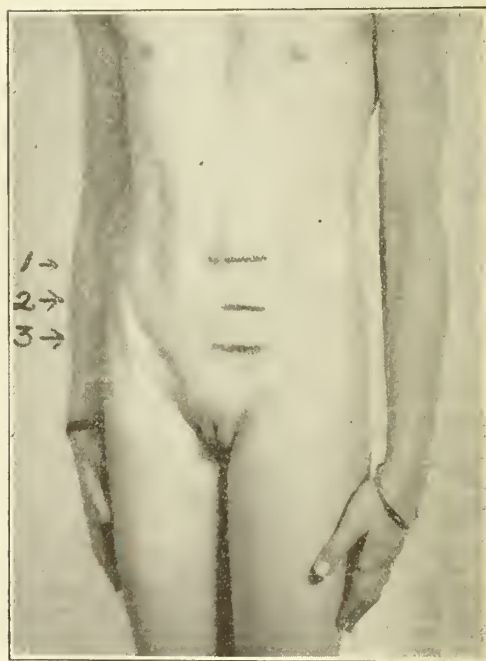


Fig. 2.

1. Iliac Crest.
2. Stomach erect lower margin.
3. Transverse colon erect lower margin.

\* (Lantern Demonstration at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Pediatrics, Atlantic City, June 14, 1930.)



conditions might exist in a child has received but scant attention.

The child is given the credit, without investigation, of being structurally normal except in such strikingly apparent conditions as pyloric

disturbed physiologic function in which the matter of food and chemistry is emphasized. Further, the young child, because of lack of development, is prone to nerve imbalance—a systemic failure of coördination. This ap-



Fig. 2-A.

stenosis, imperforate anus or other gross anomalies. It has been, and is, largely the medical habit to attribute all types of gastro-intestinal disorder in infants and children, from vomiting to constipation, primarily to

plies particularly to that part of the baby which comprises the gastro-intestinal tract, where function is entirely under the control of nerve impulses. *Imbalance and incoördination of the independent parts of the gastro-*

*intestinal mechanism explain many of the functional gastro-intestinal disorders of early life.*

During the past 20 years I have in different contributions called attention to the dependence of many gastro-intestinal ailments in children on defective gastro-intestinal mechanics. The nature and some of the results of a

loss of appetite in the infant or young child? The answer—*presence of food in the stomach*; food retention beyond the time when it should have passed into the intestine. Hunger pains do not occur in a partially filled stomach. I have investigated a vast number of these loss of appetite cases through giving a test *normal* breakfast, consisting of milk, cereal, perhaps



Fig. 2-B.

poorly functioning gastro-intestinal machine comprise the aim of this contribution. General practitioners and pediatricists are consulted daily by parents concerning children in whom the chief complaint is habitual loss of appetite; often with associated symptoms of eructations of gas, stomach pain and, in many, habitual vomiting.

What is the outstanding cause of habitual

an egg or bacon and a breadstuff, and then by means of a stomach tube determined the presence or absence of retained food, 4 hours or more after completion of the meal—repeatedly finding food residue 5-6 hours after the meal.

Fig. 1 demonstrates a girl, 5½ years of age, who had persistent loss of appetite with food retention 5 hours or longer after



a meal. In nearly all of such children there is a mucous gastritis which can be demonstrated by the thick mucus removed from the stomach—shown in the illustration suspended on wood applicators. This child's food re-

ing. An ordinary 3 meal a day diet is allowed, with the exclusion of fat and bananas; these substances are invariably a part of the retention if given to children in whom this feature is prominent.



Fig. 3.

retention after 5 hours varied from 1-3 oz. I feel that the retention is caused by pyloric spasm, due largely to gastric hyperacidity. (Hyperacidity of the gastric contents in chil-



Fig. 4.

dren—Jour. A. M. A. Nov. 25, 1922—by Kerley and Lorenze.)

The thick mucus possibly acts as a plug to the pyloric opening of the stomach. The management in a case of this sort is repeated stomach lavage at least 5 hr. after eat-



Fig. 5.

In Fig. 2 is shown a girl, 11 yr. of age, who came to us because of a persistently poor appetite and habitual constipation; eructations



Fig. 6-A.

of gas and food were of daily occurrence and vomiting was fairly frequent. The relative positions of the stomach and colon in the erect posture are shown. The lower bor-

der of the stomach in a child of this age should be 1 in. above the umbilicus. The ptosed stomach is mechanically inefficient, a slow working organ. Cases of this type also show high stomach acidity and usually mucous gastritis.

In Fig. 2-A, the position of the stomach is indicated according to the x-ray findings. The constipation can in this instance be accounted for by the ptosis of transverse and descending colon and sigmoid; demonstrated in Fig. 2-B.

*Management.* The first step in treatment of a case of this sort is to prevent a stomach over-load; but small amounts of fluid can be given with a meal, and after a meal the child should remain recumbent for 2 hours. Water



Fig. 6-B.

is given sparingly, and not over a pint of milk is allowed in 24 hours. Soups are excluded from the diet. A powder composed of atropin sulphate gr. 1/300, magnesium carbonate gr. 1, bismuth sub. carb. and sodium bicarb. each gr. 2, is given 10 minutes before meals. Parents are instructed to avoid condiments, cold drinks and iced foods. A 5 hr. interval feeding plan is invariably followed, with no food between meals. Cases of ptosis invariably make a more rapid recovery if a belt (Fig. 9) is worn during the time the patient is up and about. For the constipation a dessertspoonful of mineral oil is given at bedtime and aromatic fluid extract of cascara  $\frac{1}{2}$  teaspoonful after each meal.

Fig. 3. Chronic appendicitis may also influence stomach emptying. In these cases we

find food retention, lack of appetite, recurrent vomiting, periodic pain and frequently malnutrition; constipation alternating with diarrhea is frequently present. The illustration demonstrates bismuth in the appendix 96 hr. after the bismuth meal. The appendix in this patient was removed a few weeks after the x-ray study and was found badly diseased.

Recurrent vomiting is frequently due primarily to defective mechanics. A boy, 4 yr. of age, came to us because of repeated vomiting attacks which had occurred about every 3 months for a period of 2 years. The



Fig. 7.

attacks were very severe, producing much loss in weight and dehydration to the degree of necessitating glucose solution intravenously and subcutaneously. In Fig. 4 is shown the spastic colon of this patient 72 hr. after the bismuth meal; the bismuth meal being held for this period of time by the spastic colon. The child suffered from obstinate constipation, and daily enemas were required in addition to copious doses of mineral oil. This child represents the extremely neurotic type of individual, manifested in the intestinal tract by exaggerated nerve impulses associated with imbalance



and incoördination. In this patient, under diet and hygienic measures, atropin to the point of physiologic effect, together with mineral oil and the aromatic fluid extract of cascara administered 3 times a day in doses of ½ dram, relief of constipation and recurrent vomiting seizures was effected. Intestinal stasis of this type invariably produces food retention in the stomach beyond the 5 hr. period.

Fig. 5 demonstrates the stomach of a boy, 6 yr. of age, who suffered from violent stomach colic. The illustration shows the stomach in active hyperstalsis with spasm at both the

imbalance and defective coördination of the independent parts of the gastro-intestinal mechanism explain the colic in this case, and colic in general in infants and children. *An important point to remember is that pain (colic) due to nerve imbalance and muscle incoördination is apt to be much more severe than pain due to pathologic states—more temporary in character, and is further indicated by acute paroxysms of pain and sudden relief.*

In our radiographic studies we have demonstrated 2 types of colic—stomach colic and that of intestinal origin. There may be various remote causes but the immediate cause

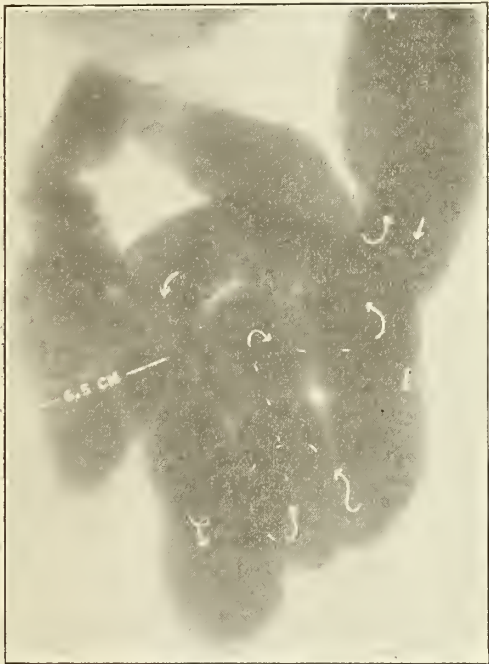


Fig. 8.

pyloric and the cardiac orifices. Because of the double spasm, particularly at the cardiac end, the child could not secure relief by vomiting. Localized circular fiber spasm may occur at any point between, and including, the esophagus and anal sphincter.

Fig. 6 A-B. This patient was an infant, 3 months of age, of the spasmophilic type who was brought because of severe colic. The illustration A shows marked muscle incoördination and circular fiber spasm. Illustration B demonstrates complete coördination both longitudinal and circular fibers in violent action with immediate forcible evacuation. Nerve



Fig. 9.

of the pain is the formation of gas block due to muscle cramp, localized circular fiber spasm with hyperstalsis of the blocked gut areas.

This infant had been carefully fed and no change was made in the food formula. Atropin, 1/1000 gr., was given immediately before each feeding; with an immediate cessation of the colic. Ordinarily, these colicky infants require food adjustment, stomach lavage and often-times dilatation of the anal sphincter.

Constipation and delayed bowel evacuation can be readily understood by study of the constipation group which follows:

Fig. 7 represents what may be looked upon as a normal colon in a child 2 yr. of age.



Fig. 8 compared with Fig. 7 demonstrates at once the cause of the obstinate constipation from which this child suffered. In cases of this sort, evacuations are invariably delayed. An elongated redundant colon explains the delayed evacuation in the great majority of children studied by means of x-rays. Any factor that causes delay in emptying of the colon is very apt to postpone the emptying time of the stomach, with consequent loss of appetite. The management of cases of this type comprises the use of the abdominal belt, mineral oil, aromatic fluid extract cascara in sufficient dosage, usually  $\frac{1}{2}$  dram or more 3 times daily after meals, to produce 1 or 2 free evacuations daily. X-ray studies of ptosis cases demonstrates that a decided support is supplied to the gastro-intestinal structure by the use of the abdominal belt (Fig. IX).

In about 75% of the gastro-intestinal disorders of infants and children are found due to defective gastro-intestinal mechanism. Therefore, every patient with a gastro-intestinal disorder, with a history of chronicity, who resists the usual common sense dietetic management and properly directed medical measures, is given the advantage of a complete gastro-intestinal study by means of radiography.

#### DISCUSSION

*Dr. Percival Nicholson* (Philadelphia): I have been interested in this subject for many years. Dr. Kerley brought out some very important points. One was in regard to chronic appendicitis, which was very interesting. I have seen in the last 18 months about 7 cases of appendicitis that only showed spasticity of the colon. They all showed very definite and distinct changes in the appendix. Some had adhesions with complete obstruction at the end, and the children had a very uneventful convalescence. I should like to ask if he has taken any blood calcium analysis in the spastic types to determine whether these patients had any low blood calcium, with regard to administration of calcium as a means of lessening spasticity.

*Dr. F. I. Krauss* (Chatham): I feel that a pupil requires a great deal of temerity to discuss the paper of his teacher. Some thoughts occurred to me as Dr. Kerley was reading this paper and showing his radiographs, and I wish to ask him for further discussion. First of all, the question of loss of appetite in children, or poor appetite, which usually begins after they are 1 yr. of age, is due to 2 factors: first, the physical factor which Dr. Kerley has portrayed, and secondly a mental one, the influence of the mother on the child, that is, her influence in trying to force too much and too frequent feedings. We are hearing so much today of mental hygiene that we must be careful not to lay too much emphasis on this mental

side, but must remember the physical side which is also very important.

I believe that many cases of poor appetite are due to the frequent feeding of infants, especially with sweet milk. I have noticed in keeping children on lactic acid and lemon juice milk for the first year that, when put on sweet milk, they very frequently begin to lose appetite or to have such symptoms as the doctor has spoken of. In several of these cases I have gone back to lactic acid or lemon juice milk and have kept it up even during the second year, with relief of symptoms.

The second cause is rickets and the loss of muscular tone, particularly the lordosis due to rickets in the first year.

A third cause might be due to the general ptosis because of the upright posture assumed. There is a tendency to forget that the child must rest after meals. It leaves the table and runs about, and immediately there is a drag and weight on the stomach and intestines to which it was not formerly accustomed. I have found that having these children rest after each meal is a very important factor in correcting the conditions.

Dr. Kerley has brought out that these cases are due to too much sweet milk in the second year of life. We cannot go back to acid milk until we have relieved the fermentative condition if it is at all severe.

In treating cyclic vomiting I thought at one time that it was due to too much fat and my routine was to put them on skimmed milk, take away butter, etc. I found a certain proportion of these children went on with their attacks. I had not taken into account the fact that these children had ptosis, and had a great deal of heavy mucus in the stomach; it was often more important than the amount of fat that was being consumed.

Another point is that pylorospasm does not stop in infancy. We think of it as occurring in the first 6 months of life, but, as the doctor has brought out, many of these children up to 6 and 7 years of age have a tendency to pylorospasm. If we treat them as we do in infancy there is relief. My greatest friend in the practice of medicine for children is atropin. I have it made up in tablets of 1-1000 gr. and dispense it rather than send a prescription to the druggist because I do not know where the druggist buys his atropin, and so many times if prescribed in solution it is kept too long and has deteriorated; I make a practice to give it at the office as long as I want the child to have it.

We should take more radiographs. It is remarkable how few x-ray pictures of the gastro-intestinal tract are taken; and it is not a difficult thing. They bring out just these points that Dr. Kerley has mentioned and I feel as he does that if we do not do this we are practicing the medicine of 30 years ago.

*Dr. Charles G. Kerley* (closing): It is quite impossible in a contribution of this kind to go greatly into detail. My time allowance only permitted of referring to essential points. Retention of food in the stomach may be due to causes relating immediately to the stomach, such as spasm at the pylorus, mucous plugs and malposition, and to remote influences such as delayed emptying of the intestine or inflammatory conditions in any part of the intestinal structure. The most frequent remote cause is constipation, regardless of whether it is due to the spastic gut, to ptosis, elongations or angulations of the descending colon and sigmoid. An important feature, therefore, in reten-

tion cases is free bowel evacuation. I see to it that 2 evacuations occur daily, when bowel inactivity is the apparent cause of loss of appetite due to stomach retention.

Among the food substances that are slow in leaving the stomach, fats of all sorts and bananas stand out prominently. Atropin is of great value in all cases of gastro-intestinal spasm regardless of the location. It must be used in full dosage, to the point of physiologic effect oftentimes.

*Probably three-fourths of the digestive ailments of infants and young children are due primarily or remotely to defective gastro-intestinal mechanics.*

This applies equally to the acute as well as habitual derangements.

## CHANGES IN HUMAN RICKETS AFTER VIOSTEROL THERAPY\*

JOHN CAFFEY, M.D.,

New York City

Fourteen cases of severe and moderately severe rickets were studied clinically, chemically and roentgenologically, before and after administration of viosterol therapy. The behavior of these rachitic patients varied considerably and the group studied is not large enough to warrant general conclusions, but 16 lantern slides were shown depicting the changes after viosterol in individual cases. One or more examples of the following types of reaction to viosterol were demonstrated in each picture.

(1) Appearance of the "line test" for healed rickets, in x-ray films, after 14 to 21 days in the usual care of rickets on adequate viosterol dosage (20-30 minims daily).

(2) The increase of lowered serum phosphorus concentration to normal after 7-14 days of viosterol therapy in the usual care on adequate dosage.

(3) In high calcium rickets, a depression of the abnormally increased calcium to normal concentration before increase in the depressed phosphorus concentration began.

(4) Rapid increase in the lowered calcium concentration, and rapid disappearance of clinical symptoms of rachitic spasmophilia, after adequate viosterol dosage. Calcium concentra-

tion became normal after 48 hr. Laryngospasm in 1 case disappeared after 24 hr., and Chvostek's sign subsided after approximately 96 hr. in a second case.

(5) Persistence of craniotables for 30-40 days after adequate viosterol therapy and many days (10-20) after the "line test" for healing had become positive in x-ray films of the long bones, and after serum phosphorus concentration had increased to normal and the product of the calcium plus the phosphorus exceeded 40.

(6) Marked clinical improvement occurred in all cases which showed chemical and roentgenologic healing after viosterol. The clinical improvement was manifested chiefly by increased activity and gain in muscle power, improved disposition and appetite, and gain in weight. None of the patients was definitely anemic, nor did any of them show enlarged spleens previous to viosterol therapy.

(7) A few patients treated with inadequate amounts of viosterol (5-10 minims daily) showed a greatly retarded response to viosterol and 1 showed no signs of healing after 40 days.

(8) The results with viosterol in this group of rachitic infants approximate those previously reported with cod-liver oil and ultraviolet light therapy.

### DISCUSSION

*Dr. Stafford McLean* (New York): I quite agree with Dr. Caffey's statement regarding the favorable effects of viosterol therapy in rickets as shown by x-rays. It is a helpful piece of academic work.

That rickets is a very important disease needs no argument and any accurate observations on the results of new therapy are of value to all of us. Dr. Caffey has asked me to show some x-ray pictures of healing with cod-liver oil, for in spite of the favorable changes in chemistry, and healing as shown by the x-ray with viosterol, we are both very cautious when teaching medical students about the use of viosterol. We stress that sufficient evidence has thus far not been obtained regarding indications for the use of viosterol except possibly in certain types of cases, and that for general use either for prevention or cure it is not a substitute for cod-liver oil.

It was formerly thought that rickets was present only at certain age period. I have a radiograph in my possession of an infant taken on the first day of life by Dr. Maxwell of Pekin. The mother had osteomalacia and this infant showed definite x-ray evidence of rickets at birth. This child was cured roentgenologically by giving the mother, who was nursing the infant, viosterol. At the end of a month there was marked evidence of healing. We have seen x-ray evidence of rickets at 6 weeks

\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Pediatrics, Atlantic City, June 14, 1930.)



of age in New York, and I have seen autopsies on infants 2 months of age who showed microscopic evidence of rickets. Rickets in our experience may occur in the second and third and fourth and even fifth year of life but in decreasing frequency.

(Slides shown.)

*Dr. Blanchard:* Do you feel as the result of your observation that it is better to give some cod-liver oil routinely with viosterol?

*Dr. Caffey:* Yes, I think it is better to give cod-liver oil with viosterol. If you want another substitute for the vitamin A content, egg yolk contains vitamin A in high concentration. We have given viosterol in large dosage with no signs of lack of appetite. Large dosage in our experience does not seem to have any untoward effect.

## SOME ODDITIES IN ACUTE MASTOID DISEASE\*

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East Orange, N. J.

To a body of men so widely experienced in clinical and operative otology, it is scarcely possible to introduce a single oddity that has not previously been met. Nevertheless, this Section might care to consider, by way of diversion, any little oddities incident to aural practice, and which go to make up the larger horizon for the otologist. Dwelling on the peculiarities of a disease, however, a grave danger lurks in the possible habit of missing the bigger issue. It is on this score that we feel some reluctance in appearing to capitalize items of important but often of wayside interest.

Perusal of literature on the atypical reveals interesting points of view, and one could not do better than quote the words of 3 recognized workers in our specialty: Benjamin Schuster, discussing Ersner's paper on atypical mastoiditis, stated that were he to write a book on otology he would endeavor to teach the student even more about the atypical than the typical mastoid. The late S. Macuen Smith, in a paper read before the Southern Medical Association, emphasized the tragedy resulting from unrecognized or atypical forms of mastoid disease. Frank Allport, being

asked to discuss T. H. Harris' paper on atypical mastoiditis, demurred somewhat on the ground that he had met so many atypical cases that it had become hard for him to know what constituted the typical.

Apparently, we are brought up on the orthodox mastoiditis of text-book writers, only to be asked to bolt to some extent time-honored points of diagnosis. A friend practicing otology said that in his intern days all was definite and clear to him, whereas after 20 years of experience in a busy clinic he had learned that practice was a great amender of early ideas. The mastoid appears to intrigue one with the simplicity of its signs of disorder. As time goes on, however, the student is slowly but surely undeceived.

The first recorded mastoid operation was performed in 1740; Jean Louis Petit, a general bone surgeon, having that distinction. Nearly 100 years elapsed before any treatise on otology appeared—that by Itard—and peculiarly enough, the first clear description of mastoiditis did not appear for 2 more generations, waiting on Friedrich Bezold to chart the signs of that disease. After nearly 200 years of mastoid surgery it is noteworthy that there is still discussion as to the relative value of symptoms calling for surgical intervention.

Of the many odd things that are informally talked about by our associates in an ear clinic, it is a jolt to me to discover that a thing that is important enough to make conversation between friends falls far short of the requirement for such an occasion as this. To sift out the experiences that might be of most interest to you is indeed difficult, and presumes your indulgence. Mackenzie has hinted that unusual anatomy may be responsible for atypical disease, while G. E. Roberts states that strange anatomy is sometimes baffling to the surgeon. Accordingly, it may not be amiss to consider for a moment the anatomic side of acute mastoiditis.

Of the structures in close relation to the operative area, the facial nerve may, by a rare chance, prove of importance both symptomatically and surgically. Alderton, in his series of specimens, found that the facial canal varied in depth from the suprameatal spine

\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Ophthalmology, and Otorhinolaryngology, Atlantic City, June 13, 1930.)



11-20 mm. Likewise, variation of nerve position in the region of the oval window was marked, considering the small size of the sulcus through which it passes. Toward the stylomastoid foramen the path may vary sufficiently from the normal to invite trouble, especially if the surgeon follows the sigmoid too far toward the jugular bulb. Byrd speaks of noticing the facial in an anomalous position while making the primary groove in a simple mastoid operation. A study of the bony canal in Alderton's opinion does not reveal dehiscences in many instances. Early palsy in acute otitis media may come from the surrounding cells or through a breach in the canal itself; the latter statement is disputed by Politzer.

A boy aged 16 came to the clinic with a strange facial expression, voluble type of speech, and history of double acute mastoiditis 6 months previously. Double facial palsy comes under one's notice rarely, and reference to this case may be appropriate under the title of odd things that may be met.

On the anatomic side of our oddities by far the most interesting seem to relate to the lateral sinus. Seymour Oppenheimer gave some interesting data on this venous channel in connection with his research on the venous system of the temporal bone. He cited an instance where the emissary vein was quite as large as the lateral sinus. This recalls the dissecting room experience of J. C. Beck; finding 2 sinuses on the same side. Allison T. Wanamaker, in his recent article on sinus thrombosis before the "Triological" society, incidentally mentioned that the right sinus was usually larger than the left and more susceptible to involvement. While the position of the sinus is a problem in chronic mastoid disease it may also occupy an unusually forward position in acute cases even where there has been no preëxisting inflammation to retard development of the mastoid cells. Thrombosis might be expected to occur unusually early in such an instance. A case comes to mind where I found the sinus crossing the mastoid at a very high level, as if to connect the lateral sinus and jugular bulb by the shortest possible route; there were more cells be-

low and behind than above and in front of the sinus; the antrum seemed especially deep in a small triangular cavity and was canted at a peculiar angle, and the nerve, though not uncovered, must have occupied a high level in the posterior canal wall to permit the sinus to go under it to the bulb. The vein, however, was not thrombosed. Philip Kerrison has reported such a case. Familial sinus thrombosis probably has no place in otologic nomenclature. Yet, I had a case where thrombosis of the sinus seemed to be a family disease, for 2 older children had been operated on in another city for this complication, and while the mastoid in my case, the third in the family, was not especially suggestive of sinus involvement, the family history impelled me to explore, and the vein was found to be thickened and discolored but still patent. By the extra bone work, customary in such cases, I was able to avoid in this instance the sinus and jugular operation. The local bony findings did not emphasize extension by necrosis. Cheatle, as quoted by Oppenheimer, spoke of a vein connecting the middle ear and sinus. Its caliber was sufficient to admit passage of a No. 1 lachrymal probe. Could this have been a family anomaly responsible for the unusual frequency of sinus thrombosis? In forecasting the position of a sinus, whether unduly close to or away from the posterior canal wall, Whiting, it is recalled, stated that if the mastoid was round and convex, the sinus was probably close to the wall; if a flat mastoid process, it was probably well back. Hetrick places some reliance on the position of the posterior perforated space as indicative of the downward turn of the underlying lateral sinus. In spite of helpful surface markings, most of us by way of reassurance, seem to tip-toe in our operation until deeper landmarks are revealed.

In closing the anatomic aspect of our subject, it may be said that in acute otitis media the center of expansion would seem to be in the posterior superior region of the tympanic cavity, from which part cells diverge in almost every possible direction. While communication with the mastoid antrum is easiest in the vast majority of cases, it is conceivable,

in freak formations, that free intercellular communication may tend in unusual directions. Pressure is equal in all directions if we may apply here the Pascal principle. It is a matter of resistance to expansion. Cellular connections may take the process far afield of the original focus, and at a very early stage of invasion.

A boy about 12 yr. old came to me with the story that swelling of the cheek occurred almost coincident with his ear-ache and ear discharge. While his ear canal and mastoid tenderness were not significant of severe mastoid involvement, his temperature and face pain compelled action. Relief was immediate and lasting in spite of the fact that there was no unusual pathology in the zygoma. It is much in the same way that resolution occurs in Gradenigo syndrome cases after the simple mastoid operation. Trouble is relieved by retrogression in many cases if the operation is carried close to the supposed center of maximum pressure. Bowers, at a recent meeting of the New York Academy of Medicine, reported a case of extension in probably the same manner, because he was able to insinuate a fine probe in the path of the sinus that extended to the nasopharynx. A post-pharyngeal abscess was the ultimate thing in this case, as in one of my own, in a much younger patient however. The venous plexus connecting the middle ear and the orifice of the eustachian tube probably explains the pathway of infection in some instances (Openheimer). Max M. Kulvin reported a true case of subtemporal abscess, explaining that pus determined itself in the zygomatic fossa because the anterior fibers of the temporal muscle are loosely attached while the posterior ones are firmly adherent to the skull. Many years ago I saw a case that presented pus in the cheek.

Trauma of the mastoid process that affects the underlying cells to the extent of requiring operation is illustrated by a case I saw operated on by Elliott Shipman, during my hospital internship. A young adult had been shot and the bullet flattened out on the mastoid process near the tip. The destruction was extensive enough to justify the simple mas-

toid operation. Imperatori recorded the case of a baby that developed an operative mastoiditis from a fall, the impact being behind the ear; a sinus thrombosis complicating because the sinus plate had been fractured.

Many excellent articles, too numerous to recite, have appeared on the peculiar nature of the *Streptococcus mucosus* infection of the middle ear and mastoid. Guggenheim and Ferris recently contributed an illuminating article on this type of infection, entitled "dry necrosis of the mastoid", in consonance with the title chosen by Oscar Wilkinson. Cases are recorded by others where middle ear symptoms were lacking, suggesting the descriptive title of mastoiditis without tympanic involvement. Also, under the title of "atypical mastoiditis", the odd ways of the *Streptococcus mucosus* have been described. Guggenheim and Ferris introduced their cases as representing a peculiar form of mastoiditis characterized by an infection of long duration, few symptoms and an extensive dry necrosis. New, I think it was, found that these cases occur with an infrequency of 1:500, and it has not been my privilege to meet a case with positively no antecedent middle ear involvement. Some years ago a woman aged 30 came under notice with indifferent tympanic and mastoid symptoms, but a low grade headache on the suspected side, a slight fever and a hemorrhagic nephritis. Operation disclosed a mastoid that appeared to be undergoing resolution—not a drop of pus or other secretion was found—simply a little redness; yet, threatened chagrin faded as all symptoms promptly subsided. A 7 yr. old boy, answering the same type as to symptoms, except renal irritation, showed the self-same condition of the mastoid and the same satisfactory postoperative course. In another instance, in a girl of 20, the operative findings were totally different, yet the healing process, though rapid enough, was almost alarming in its dryness. No cultures were taken and it is unfortunate that the organism was not isolated in any of the foregoing cases. Dry healing seems not to be mentioned in the reported cases of dry necrosis and may be quite another infection. Kopetsky thinks that the



Klebs-Loeffler bacillus may be the organism in some of these atypical cases. J. G. Dwyer, in a personal conversation, stated that the *Streptococcus mucosus* may give trouble even after the ear and wound have healed, the hypothesis being that trouble starts anew when the capsule of the organism is dissolved, possibly a matter of months longer; since the outlet for the new discharge has been shut off, intracranial complications threaten.

With a dry ear, a normal canal wall, and all in all a dearth of local symptoms, the diagnostic ability of the clinician is surely put to the test. With regard to children an observant mother may save the day. An ear history, however remote, may provide the single clue. Altered appetite of the child, failure to gain in body weight, morning moisture of the night clothing, have, singly or in combination, prompted me to make an investigation of the mastoid where constitutional reasons seemed lacking. A night's sleep that is disturbed, if only for a little while, may be tell-tale, as pointed out by Ewing Day, of Pittsburgh. Misbehavior of peristalsis has been alluded to very much in recent years and some of the members of this Section may wish to elaborate on this symptom. As regards adults, MacKenzie says that most local symptoms may be absent, but least frequently of all, some drooping of the posterior canal wall. Many writers seem to concur in this opinion. With a dry middle ear, but a suspected mastoiditis, Hetrick thinks that the Weber-Schwabach paradox test is of assistance in arriving at a diagnosis. Again, easily induced fatigue may suggest the undertow of a long standing but latent infection. W. S. Tomlin reported a case of 10 yr. of invalidism and the prompt gain in weight of 20 lb. after a mastoidectomy. According to many, audition may be unaffected, but should always be tested for possible loss. In these obscure cases it is the individual as much as the ear that might disclose etiology of the illness, bearing in mind that a systemic something may be found to act as a herring across the scent and delay the correct diagnosis of mastoiditis. It is not the many symptoms in the early phase of the disease that should concern us, but the lone

and persistent symptom that too often finds us complacent.

As between the meaning of white cell and red cell count, each has its adherents. Latent mastoiditis, in Hetrick's analysis of reports, occurs anywhere between babyhood and senescence. The period of latency may extend, as in Bar's case, up to 2 years, perhaps more. As already quoted from Macuen Smith, serious pathology is not a surprise. The radiograph seems to serve its best use in symptomless mastoiditis. Granger, in a recent contribution to radiology, described a technic and interpretation that proved useful with infants.

It would be superfluous to report some of my own experiences when the literature abounds in illustrative cases. The lack of tympanic symptoms in these odd cases of mastoiditis gives rise to the conjecture as to whether or not they may be of hematogenous origin. Glogau believes that primary mastoiditis is a clinical entity. Taylor, of Jacksonville, as quoted by Mallison, cites a case of mastoiditis developing secondarily to a bacteriemia, while T. E. Carmody, in connection with Hempstead's paper, recalled that a blood-borne mastoiditis seemed to occur in an ear opposite to the one he had operated upon.

Classified as atypical and sometimes leading to operation is the type of case described as mastoidalgia. My Chief of Clinic was implored by a neurologist to operate on such a case. In his final letter of refusal he explained that the best result he could possibly get would be to restore the ear to the condition it was then in. Byrd, in the course of conversation, cited a case where there was, however, a high degree of deafness, actual pain and occasional watery discharge, and on operating he found hyperostosis in the region of the attic and aditus, cramping the ossicles. After creating room where needed the patient regained her hearing and enjoyed complete comfort. Harris related an instance where simply a skin incision yielded a splendid psychic result. If the maxillary antrum has now its back against the wall as to normality, the mastoid antrum, likewise, is seldom a normal part in the eyes of critical observers.



Time and again a radiograph of an unsuspected mastoid antrum yields evidence of trouble. When is this antrum well, is a pertinent question.

In viewing our middle ears and mastoids from another angle, it almost appears that these parts are susceptible to vasomotor changes. A young man called at the office on different occasions with an acutely inflamed middle ear and apparently a mastoid inflammation. His attacks, while of sudden onset, generally disappeared just as suddenly in a few hours, suggesting an analogy with the mucous membrane of the nose and maxillary antrum that balloons and then collapses with rapidity. Haskin, with others, believes that an abscessed tooth, even without sinus involvement, may alter the course of a mastoid inflammation. Two cases have come under my care where extractions seemed to cause an abrupt turn of events for the better.

Robert H. Fowler believes that there are carriers of mastoid disease, and I hope he will explain, while here, his scientific example of *cherchez la femme*. Meanwhile, it is hoped that these scattered remarks on the mastoid and some of its peculiarities may lead you to tell of bigger things.

#### DISCUSSION

*Dr. Henry C. Barkhorn* (Newark): It is always a pleasure to discuss a paper of Dr. Pannell's. He has a message, and he gets it across.

Atypical mastoids are the bane of our lives. It develops that the more mastoids you see, the more mastoids you do, the fewer are typical if you get back to your fundamentals. In the infant, the antrum is at 12 o'clock; at 1 year it is at 1 o'clock; at 3 years it is at 3 o'clock. Naturally, the child has prolapse of the canal without mastoiditis because the antrum is right over the canal. When a child has a funnel-shaped canal it has a mastoid; these are the cases that don't get well without operation. Of children who have a prolapse of the canal, the vast majority get well on conservative treatment.

If you follow along anatomic instead of pathologic lines in your operative procedure, you will make fewer mistakes. Take out all the cells that *may* be diseased, not only the cells that are visibly diseased.

Consider the ear that is apparently normal but has a history of earache, that has half-headache, has pain behind the eye; this brings us to the work that Dr. Eagleton has recently done, and, by the way, there is an article in the March Archives of Surgery—not of Otolaryngology but of Surgery—by Dr. Eagleton that is of outstanding importance. There are 2 ways that you can get an apex involvement. One is through the extensive cellularization of the petrous pyramid. The other is by an embolic process. The one is sick from the

very beginning, has a headache out of proportion to his mastoid findings, may or may not have Gradenigo's syndrome, but he gets well in the vast majority of cases without any further operative procedure because his is the cellular mastoid. The other patient has a mastoid, is doing moderately well, and suddenly has a shot of temperature, chill, rigor, convulsion if a child, and then has a pain behind the eye, middle and posterior fossa syndromes; he has something in the apex of his pyramid which doesn't get well. No matter how extensive your mastoidectomy is, you can't drain an osteomyelitis, embolic in nature, in the bone marrow of the apex. There is where Dr. Eagleton's operation, of unlocking the deepest portion of the petrous pyramid, comes into its best field. He takes away the dural plate, takes away the sinus plate, takes away the angle of the petrosa, unlocking the posterior and the middle fossa, he separates the dura in as far as the apex in the middle fossa, separates the dura in as far as the internal auditory meatus in the posterior fossa, and if there is anything there finds it. That is the real reason for such success as we have had, this operation of unlocking the petrous pyramid.

*Dr. Robert H. Fowler* (New York): Dr. Pannell and I worked together in Dr. Rae's ear clinic at Manhattan, and in talking over his paper I told him the following story about a child 4-5 years old who had a mysterious mastoid infection which repeated operations failed to clear up. Talking about affinities—the child's family was French, the child could not talk English, and they had a French nurse who must always be present. It was not possible for the surgeon to handle the case and still get rid of the French nurse, so she was always present with that child. The French woman and the child were so passionately fond of one another that it was pathetic to see when Mademoiselle had to take an occasional hour away from the bed side. The trained nurses who had the professional responsibility kept objecting to the presence of someone who would disturb the diet and who brought in irregularities and innovations. The operation had to be repeated more than once, and the best consultants in town had no suggestion as to why this child should be singled out more than others for recurrent infections, until one day Mademoiselle herself came into the office with a running ear, developed an acute mastoid and then for the first time acknowledged that she had been suffering for weeks with earache. As soon as she was definitely off the case the child's mastoid cleared up. The professional nurses thought that Mademoiselle had been kissing the child, contrary to orders, and that she was a carrier. Instead of a "Typhoid Mary" this was a case of "Mastoid Mademoiselle". There was a curious sequel to that story; 3 months after the nurse recovered from her own mastoid operation the question came up as to whether I would be willing to recommend her to another family as a child's nurse. I liked this Mademoiselle. She had been very loyal, she had every virtue that a human being can have, and had showed a remarkable affection for the children. But 2 of the children in the first family had endured mastoid operations, and though she was a good children's nurse it was a matter of professional judgment as to whether there was not a risk of her carrying infection into a new family. There was so much doubt about this that I found it better not to recommend her. She didn't get the job but went to work somewhere else, and now you will be surprised when I tell you that the child that she *did not take*

care of came down with an acute mastoid. So, perhaps it was just as well for the French nurse that she had not taken that job and incurred any question of blame.

This story if it stood alone would mean nothing, but it does not stand alone. Perhaps you will remember that Oliver Wendell Holmes was a doctor, and that he discovered by making observations in ward work that puerperal infections, post-partum infections were contagious. That was 60 years ago, and we now take full precautions against the spread of such infections, but are we justified in assuming that otitis and mastoid infections are never contagious? I think not, for in my own practice there have been not less than half a dozen cases where a patient seemed to get the mastoid infection from someone near by who themselves suffered from acute or chronic ear trouble.

In a ward of 40 mastoid cases in the army 2 things happened that would be surprising if it were not admitted that certain germs have definite affinities. It isn't on the cards, it isn't in the books, but the orderly whose job it was to pick up the cotton in that ward came down himself with an acute mastoid, and two weeks later 1 of the doctors, a general medical man who had his quarters directly across the hall from my own, came down with an acute mastoiditis and had to be operated on. From then on, screens were placed between the beds in the ward and other steps taken as though the streptococcus was contagious.

This thing doesn't happen often, but when you have recurrent mastoids to handle let me advise you to look with suspicion at those who are in closest contact with your patient, remembering my story—*cherchez la femme!*

*Chairman Emerson:* This subject that Dr. Fowler speaks of is new to me, but it certainly is something more than coincidence. Last Monday night, I asked my associate to do a mastoid operation on a dentist's son. This dentist has 2 boys. His other boy has had 2 mastoids, and this was the second this boy has had. They are the only children in the family. Incidentally my 2 daughters had mastoiditis and were operated on 4 days apart, several years ago, during an epidemic of measles.

We have often remarked in our work that it was remarkable that there seemed to be certain families with 1 to 6 children, in which we have done in the last 10 years anywhere from 3 to 8 mastoid operations. There are some families in which all their children, 3 or 4 children, have had mastoiditis. I have in mind 1 girl, a very strong, healthy, well-developed, handsome girl of 12 who had 7 mastoid operations; 4 were done by surgeons in New York before I saw her, and 3 were done by me in 3 successive years. This child had an excellent nose and throat, yet every time she got a cold, one or the other of her mastoids blew up.

What Dr. Fowler has said certainly gives us food for thought. It does mean, as I look back over our practice of the last 20 years and recall the numerous families in which we have had multiple mastoid operations, running as high as 8 in some families, that it merits serious consideration.

People have said to me: "Is mastoid disease catching, or can this child which has had mastoiditis once have it again, or is it more liable to have it than one who has never had it?" My

answer has nearly always been to all those question, "No", but I believe that I have been mistaken, and I believe there is a certain kernel of truth in what Dr. Fowler has had to say on this subject.

## TONSILLECTOMY UNDER LOCAL ANESTHESIA\*

ROBERT H. FOWLER, M.D.,  
New York City

The modern tonsil operation under local anesthesia is a far, far better thing than those that preceded it. Bleeding is controlled; there is no pain, and only slight discomfort; the operation is an open one with full visibility at every step, and it is complete, removing tonsil and infratonsillar nodules to the very base of the tongue; and, in the most successful cases the slight trauma leaves the muscles of the tonsil bed intact.

To obtain these desirable results it is necessary to pay attention to the details of technic. Not any particular man's technic nor any one set of instruments. The improvements I am about to speak of have been instituted by many surgeons in different parts of the country. It will simplify matters to take them up under the following 14 points:

- (1) Spraying the throat with parasthesin powder.
- (2) Injection of novocain; floating the tonsil.
- (3) Incision.
- (4) Grasping the capsule.
- (5) Cleaning the white layer of the capsule.
- (6) Fibrous attachments freed.
- (7) Mucous glands saved.
- (8) Upper lobe cleared.
- (9) Differentiating and injecting muscular belt.
- (10) Sponge placed in fossa.
- (11) Shaving off muscles.
- (12) Snaring lower pole.
- (13) Removal infratonsillar nodules.

\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section of Ophthalmology and Rhinology, Atlantic City, June 13, 1930.)



(14) Powder fossa. Tie vessels. Examine removed tonsils.

The time is short and it is better to illustrate with pictures and speak briefly than to read any lengthy discussion. (The technic hereafter described was illustrated by lantern slides.)

Parathesin powder full strength is sprayed on the throat twice with a 2 minute interval. The surface of the tonsil and pillars, and perhaps the whole pharynx, is included if there is a persistent reflex. Then 10% solution of novocain on an applicator wound tightly with cotton is rubbed over the surface of the pillars and plica triangularis. This is done 3 times at 3 minute intervals, the applicator being turned or spun in the fingers each time. Ten minutes later an angular needle is used to make injections of 1% novocain with a few drops of adrenalin added. The object is to float the tonsil, introducing the needle precisely where the incision is to be made. The point of the needle must always be placed close to the capsule in the theoretic space between it and the surrounding muscles of the tonsil so that the solution cannot be absorbed but will come out at once when the tonsil is removed. The fluid starts to run out the moment the incision is made. The initial prick of the needle can be made barely perceptible, if the point is sharp and the needle fine, and the novocain is projected  $\frac{1}{4}$  in. always in advance from there on. It is not sufficient to flood the upper lobe, that is the upper pole, of the tonsil, but even greater care must be exercised in flooding the lower lobe; and this is, for anatomic reasons, a more difficult procedure.

*Posterior pillar flap.* It is difficult to run the incision straight down the posterior pillar without tearing the mucous membrane. It can be accomplished better with a sharp knife and it is often found possible to shape a flap to cover in with mucous membrane the upper quarter of the posterior pillar. Fixation of posterior pillar is helpful.

*Anterior pillar.* The incision is carried downward over the plica triangularis, saving a flap of mucous membrane from its surface, and terminates at junction of the anterior pil-

lar with the base of the tongue. If the whole of the mucous membrane from the plica triangularis be left in the throat it is often found to contain lymphoid tissue, infratonsillar nodules, at the lower third. These can be seen and the incision can be patterned to skirt them before reaching the base of the tongue.

*Grasping the capsule* with forceps is an improvement that has lately been introduced. It has an advantage over the established custom of seizing the lymphoid mass of the tonsil tissue, in that it keeps the capsule taut and gives a higher degree of visibility. The forceps used for this purpose is an Allys clamp with box lock and extra grasping teeth. The white layer of the capsule is the final single layer of pharyngeal fascia on the north pole of the tonsil. The more professional certitude displayed in denuding this thin layer, known as the capsule of the tonsil, without breaking it, the better chance there is of escaping hemorrhage and leaving a protected wound; one with enough fascia covering the muscles to prevent their becoming infected. The fibrous attachments are cleared from the upper pole by meticulous sharp dissection and the mucous glands with their blood supply are separated from the tonsil. The lilliputian attachments are shaved from the tonsil bit by bit till the pink layer to be left in the fossa is clearly contrasted with the white dry surface of the upper lobe of the tonsil. When the upper lobe has been altogether freed the muscular attachments appear attached to the equator. It is well to inject these with novocain to cut off a branch from the ninth nerve.

A sponge, half the size of your thumb, is placed above the tonsil at this time and the upper lobe of the second tonsil is freed. When the sponge is removed the muscular attachments at the belt and lower lobe can be shaved from the surface of the tonsil with a razor edged knife. By shaving I mean a process of freeing bit by bit the firm attachments between the capsule and the tonsillopharyngeus muscle.

There is an old saying—"beware the snare". That phrase, when I use it, means use your snare not to dissect muscles but to sever the lower pole from the base of the



tongue and to clear away infratonsillar nodules, if any are present, from the lowest portion of the plica triangularis where it attaches to the base of the tongue. These nodules have come in for a great deal of discussion lately. When left in the throat they prevent the clearing up of cervical adenitis. When the tonsil with the infratonsillar nodules has been removed, the operation may be finished by powdering the fossa with bismuth and tying 1 or 2 of the larger vessels. The most important one is at the center of the fossa where the posterior pillar joins the lateral wall. Instead of a slip knot, a needle may be used to place a suture under these vessels.

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### ADVANTAGES OF GENERAL ANESTHESIA IN TONSILLECTOMY\*

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WILLIAM CAMPBELL, M.D.,  
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Although I am speaking on the advantages of general anesthesia, I do local anesthetization on suitable cases. Looking over my records of patients over 16 years of age, I found that 65% were done under general anesthesia, but I do not mean to infer that a greater percentage could not have been done under local but that general was the anesthesia of choice in those cases.

In neurotic people where apprehension is apt to be present, there is considerable mental shock during local anesthesia. In one case I know of, a highly strung woman was in bed for several months following a nervous breakdown that occurred a week or two after the operation. Where bleeding may be expected, or where you have an excessive amount of fibrous tissue, from repeated peritonsillar abscesses, I feel that general anesthesia is easier on the patient and certainly much easier for the operator; and I do not know of anything more trying than a tonsillectomy under local anesthesia on a panicky patient.

In arteriosclerosis and high blood pressure the use of adrenalin and novocain will sometimes raise the pressure 20 points. In such types I decide by judging the individual and have not had any trying experiences either way. A few months ago I had a 9 year old girl, referred to me by an internist, with the history of a congenital pulmonary stenosis and a rheumatic condition. He did not consider the heart competent for general anesthesia, and considered the case a poor risk. The urine was normal, also the bleeding and clotting time. I removed the tonsils under local anesthesia and with very good cooperation from the child. She had an excessive amount of adenoid tissue, which was removed under first stage ether anesthesia. The child did not have any postoperative bleeding from the tonsils, but 10 hr. later had a uterine hemorrhage of 500 c.c. which was repeated twice, making 1500 c.c. in all, and did not stop until after a small transfusion. After the hemorrhage, cyanosis was gone and the child never was in shock. A blood count taken later showed 6,500,000 red cells without any abnormal findings. I do not know to what we should attribute the cause of the hemorrhage.

In children, I prefer general anesthesia. I have seen, several times, uvulectomy and injury to the soft palate result from intractability of the patient under local anesthesia. Adhesions of the pharynx need only be under one's care for relief to make us sufficiently appreciate the necessity of prevention.

A competent anesthetist and assistant are essential, and I have not had any complications, such as lung abscess, etc. Hemorrhage, under general anesthesia, will be greater at the time of operation but you are in a better position to control it and in all cases the throat should be dry before the patient leaves the table. I believe you are more liable to get postoperative bleeding 5 or 6 hours later after local than after general anesthesia.

I do not see any reason why the actual mechanical work, using the dissection and snare method, should not leave just as good an after-result whether it be done under local or general anesthesia.

I think the outstanding advantage of gen-

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\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Ophthalmology and Otorhinolaryngology, Atlantic City, June 13, 1930.)

eral anesthesia is the convenience to the operator.

#### DISCUSSION

*Dr. Theodore W. Coriein* (Newark): I think we have listened to a wonderful description of the tonsil and tonsil operation, by Dr. Fowler. I am sorry that our discussion must be limited at all. One hates to be limited when he has such an opportunity for speaking of this wonderful subject. The demonstrations by Dr. Fowler really very much simplify the subject. You know from your own observation and experience that the relation of the tonsil to the outer wall of the throat is comparatively little understood. In fact, so far as we have had to depend on text-books for the anatomy of the throat, very little has been said of the external relations of the tonsil, and yet they are what we are up against. It is to be remembered that the operation of tonsillectomy is really an operation that is extratonsillar in character. We don't operate on the tonsil. It is very important, therefore, that we should know the external relations of the tonsil.

I have tried to keep up with the methods of doing the operation. My preference has always been for the dissection and snare method, using the snare method a little more freely than we used to do or than Dr. Fowler suggests. As compared with other methods, I think the dissection snare method has very great advantages. The advantage Dr. Fowler speaks of is notable, in that you can follow the course of the operation very carefully. The great point, of course, that Dr. Fowler has demonstrated, is the existence of muscular tissue which enters from the muscles of the throat wall into this fibrous capsule or into that layer of pharyngeal fascia which constitutes a capsule for the tonsil. I know very well that we encounter difficulty in clearing the tonsil capsule at the equator of the organ, but the explanation before has not been very explicit. Now, we can go out with an understanding that will aid us greatly and save us very many complications.

The question of hemorrhage always comes up. I don't want to enlarge upon that except to say that entry of the blood vessels into the tonsil occurs through this equatorial region which contains muscle fibers. In approaching the tonsils, the arterial vessels keep subdividing and attain small caliber perhaps when right in contact with the tonsillar tissue of the capsule. If you cut through the muscular attachment, you encounter large vessels, comparatively, and you are more liable to have bleeding. If you are careful to follow the actual surface of the tonsil, as near as can be, you cut across these vessels when they are down to a comparatively small size, owing to rapid subdivision.

The subject of anesthesia has been demonstrated beautifully by Dr. Fowler. I notice that he makes more insertions of novocain solution than I have been accustomed to, and notably the direct injection to the glossopharyngeal nerve opposite the lower lobe of the tonsil. That is an important point to be remembered as even at best under local anesthesia there are some people who feel a little pain when the glossopharyngeal nerve is approached. I have always been accustomed to giving my patients morphin and hyoscin in such doses as to make them stuporous an hour before the operation, and generally patients have no pain if they attain that condition. The pain is more apt to develop when the snares are used. That is a violent process and not only cuts but it also draws

upon the tissues of the throat all around at some distance from the cutting wire. I will say that local anesthesia can be made very complete indeed. I do it for nearly all my operations where the patient is able to sit up and control himself. I think the main part of control is psychic. If the operator is nervous and fidgety he doesn't have team-work, and if he shows any apprehension or awkwardness himself that is sure to be imparted to the patient. But if an operator approaches with confidence, the patient will be assured. Things to be avoided are those which excite the patient. I think that depression of the tongue is one of the things you have got to be careful of. I depress it very little and turn it to one side. If you bring the tongue in contact with the posterior wall of the throat you are sure to have some difficulty of breathing, and that is a thing which is bound to excite the patient. In the same way, the posterior wall of the throat must not be touched by the instrument. Never swab the posterior wall of the throat if you want to get along comfortably.

*Dr. H. V. Hubbard* (Plainfield): I have been rather surprised that there has been no mention of the toxicology of local anesthesia. Since novocain has come into use there hasn't been much question about the toxic effect, although there have been some cases of mistake in solution used, and in my experience at the Post-Graduate Hospital in New York I have seen some instances of toxic effect.

The method of operation may vary with the operator. One man gets accustomed to using a certain form of modified Sluder, and does it very well, producing good results; and another man gets accustomed to the dissection and snare, and he also does the operation very well. So that in the hands of different men different operations and good results may be obtained.

*Dr. Dikran M. Yazujian* (Trenton): In the matter of anesthesia I think we should be careful in tuberculous cases. I remember seeing at least 2 such patients who had their tonsils removed under general anesthesia which aggravated their disease and death followed in a short time. I think it is a great mistake to operate on people with tuberculosis under general anesthesia. We must draw the line there, I believe. We must always operate on them with local anesthesia, and I prefer, like Dr. Fowler and others, novocain with adrenalin in it.

Injecting the tonsil. I find that only 3 points along the anterior pillar are all we need, because, the fewer points we inject the less edema we will get and the less obscuring of outlines of the posterior pillars. I go through the anterior pillar and inject behind the tonsil in 3 places. The lower pole of the tonsil we must thoroughly anesthetize because in my experience it is the most sensitive part. There is where the patient will have pain if it is not anesthetized well.

The kind of tonsil syringe is a very small matter, but I experimented with several different kinds and the one I found most satisfactory was the Cook syringe. It is nothing but the frame of a syringe, as you know, and the novocain carpules come all ready to be slipped in to take the place of the barrel. You just take out the used carpule and slip another one in and it is ready again. Another advantage of it is that there is no danger of getting your solutions mixed. For instance, if you have been using cocain for surface anesthesia before you inject the tonsil, there have been cases where cocain and novocain have been confused



and the patient has died from the injection of cocaine. This method avoids all that, because the carpule comes with the right solution in it and labeled.

I think we all agree that patients who have had attacks of quinsy should be given general anesthesia instead of local, because there is so much scar tissue that the local anesthetic will not penetrate enough to make the operation painless.

As to the technic of tonsillectomy, after using dissection, snare and Sluder methods, each for several years. I have adopted the La Force technic, which I have now used for 6-7 years. I prefer it to the other methods because it removes the tonsils, and only the tonsils, cleanly and with much less bleeding and with much less reaction in the throat.

*Dr. Fowler (closing):* It has been a great honor to come down here and talk to you and show these movies to your society. I like to meet men who are on the frontier of our work, who are themselves doing the operating day by day and who are willing to listen to something which may help them. There is no subject that is numerically so important as the tonsil operation; it constituted one-third of all surgery in the United States during the last 10 years, and there is no operation we owe more to in the way of study.

The suggestions that were made in the discussion can be very quickly answered. I have here something which I think covers 2 at 1 shot. This is an x-ray film of the lungs of a child 5½ yr. old whose operation had to be done under *local* because, as you will see, the tuberculous process had destroyed one lung. The doctor who sent the child into us said that to give ether was out of the question, the tonsils were very bad and the operation under *local* would be a life saver if it could be done. The operation was successfully performed, thanks to using the kind of psychology that Dr. Corwin has suggested. The boy was given a promise of a boat as a present from his mother if the first tonsil came out all right. A tear trickled down his cheek, then he was told that he could have his choice of another present if he let the other tonsil come out, and he sent out word to his mother, after thinking a minute that he would like a radio on the boat. The mother said he could have that, and then gently and slowly the novocain was introduced. I don't know whether you have ever seen an operation on a child well under 10 yr. old of that type, but it was remarkable with what ease physical removal of the tonsil took place, and it is remarkable sometimes to see how these children react to the proper encouragement, undergoing what used to be thought a very difficult procedure.

Dr. Hubbard, I think it was, spoke of the toxicology. I apologize to you for not having taken that matter up. It is, I think, the one serious danger to be thought of and must be considered by everyone doing local work. Everyone who has done any of this work has seen either fatalities from that or dangers of fatalities through the *accidental substitution of a drug*, because the 2 clear fluids are on the table in similar glasses, and the doctor, thinking of his work, gets the syringe in the wrong glass. This can be definitely prevented by coloring the stronger solution.

*Chairman Emerson:* How about adrenalin?

*Dr. Fowler:* Adrenalin I think is very much less apt to cause fatalities, because the adrenalin is added by the nurse, say, the 6 drops or whatever

you order beforehand, to the solution, and the doctor isn't apt to put his syringe into a brown bottle marked adrenalin. But he is apt to take a strong solution (10% cocaine) that is clear white and is on the table there next to a weak solution (1% novocain) that is clear white and also on the table. These may get mixed at the pharmacy, they may be mistaken by the nurse, they may be substituted by the doctor. You have got to prevent in your local work absolutely any such thing as that happening or you will have accidents.

I have seen in New York 2 actual fatalities in the hands of doctors of high repute through their making that mistake, and it is easy to prevent. You just put a fence around it, if you know what it is. One of the doctors suggested that a Cook syringe is the answer. Well, that is one answer, a syringe with an ampule, where the solution is made up beforehand. Or, if you prefer to have another syringe with perhaps a finer needle than the Cook—it has a rather heavy needle—you can use the solution fresh from the ampule put into an open glass at the time.

There is another way, and that is if you have novocain 10% on your table, or perhaps you choose to have 10% cocaine there, then have it a *different color* and you won't mix them. I always have my strong solutions on the table *blue or red* and so well marked there is no danger. It is known nowadays that there is no danger in adding a couple of drops of gentian violet, and that prevents you from substituting the stronger solution for the weaker injection fluid. That certainly should have been mentioned in this paper.

## A STUDY OF OBSTETRIC MORTALITY

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As an introduction let me state that some people say obstetrics has become a surgical specialty. To this we cannot subscribe, for the majority of all deliveries always have been and always will be conducted by the general practitioner. The advance that has been imparted to surgery through the perfection of technic, bacteriologic studies and practice of asepsis, has placed at our disposal a means of opening the birth canal that was not dreamed of heretofore. That this weapon has been used with indiscretion is only too apparent. Let us for the moment glance at some interesting statistics, concerning the maternal and infant mortality and morbidity.

First is a report of the New Orleans Gynecologic and Obstetric Society, which covers the cesarean sections performed in 6 hospitals of that city over a period of 6 years.



During the years covered by this report, 291 cesarean sections were performed and the incidence based on 16,000 deliveries in the same period was about 2%. More than  $\frac{1}{4}$  of those operations were done by 3 men, 1 an obstetrician and 2 general surgeons. Only 12% were done by the transperitoneal low cervical technic. An analysis of the maternal mortality from the standpoint of indications for operation shows that out of 41 eclamptics in the series 17 were lost, a mortality of 41.5%. The operation for other toxemic conditions gave a mortality of 25%. Glancing at the fetal mortality, one is impressed first by the fact that out of 55 deaths, 20 occurred in premature children. Immediately the question arises whether cesarean section is justified for premature babies. As a direct result of placenta previa 13 children were lost, which is more than 39%. In this series of 291 cases, 47 mothers were lost, a mortality of 16.1%; 55 babies, a mortality of 18.9%; and the fatality was a dual one in 16 cases. Since the above report, 31 cases were operated upon by the low cervical technic with no mortalities.

Now let us look at a survey of cesarean sections in the Borough of Brooklyn during the same years. In this group there were 934 cases with a maternal mortality of 54, or 5.8%. In 104 cases that were operated on for eclampsia there were 27 deaths, a mortality of 26%. A fetal mortality of 25.6%. Among 273 classical operations in which no vaginal operations had been made there were 16 deaths, a mortality of 5.9%. Among 199 classical operations where vaginal examinations had been made there were 27 deaths, a mortality of 13.6%. Among 66 lower segment operations without vaginal operations there was 1 death, a mortality of 1.5%, and among 57 of these operations performed after vaginal examinations there were 6 deaths, a mortality of 10.5%.

The latest report comes from the city of Los Angeles, over the years 1923 to 1928 inclusive, with a series of 1322 sections, 1060 classic and 262 low cervical, performed in 12 hospitals, with a mortality of 4.2%. In the series of 1322 cases there were 107 fetal deaths, or a mortality of 7.9%; 37 of these

deaths were in premature infants, 6 were monsters and 5 were still-births. This is a much better report, but leaves much to be desired. I wish to give you the indications for this group of 1322 sections:

Pelvic disproportion	488
Eclampsia	46
Premature separation	25
Previous abdominal operations	30
No progress	112
Cardiac disease	38
History of difficulties	29
No cause found	42
Prolapsed cord	4
Prolapsed cervix	1
Fetal distress	2
Contraction ring	3
Ruptured uterus	4
Intrapartum infection	1
Intestinal obstruction	1
Recent laparotomy	1
Strangulated hemorrhoids	1
Hydrocephalic baby	1
Previous cesarean	197
Preëclampsia	187
Placenta previa	68
Fetal malposition	61
Old primiparas	55
Fibroids	28
Sterilization	27
Insanity	1
Epilepsy	1
Anemia	2
Pernicious anemia	1
Request	4
Thyroid	1
Diabetes	1
Pyelitis	2
Gain in weight	1
Nervousness	2
Doubled uterus	1
Dysmenorrhea	1
Dead fetus	2

Now let us look at the mortality records of the United States in the past 10 years. In 1915, the maternal mortality rate in the registered area was 6.1%. In 1920 it was 8%; in 1927 it was 6.7% per thousand births, and of this number 40% of all maternal deaths were due to infection, supposedly a preventable cause, while 27% are chargeable to eclampsia and the toxemias. Of the remaining 33% about 10% may be allotted to dystocia and operative labor. The remainder may be credited to the accidents of pregnancy and labor.

To substantiate the belief that operative intervention increases maternal mortality, listen to the mortality rate in Massachusetts. In 1901 the rate of deaths per thousand live births was 3.8%; in 1905 it was 4.2%; in 1910—4.8%; in 1915—5%; in 1918—8%; in 1920—7.5%; in

1924—6%. In an analysis of 1000 fatalities, death occurred in 225 from puerperal infection, 217 from toxemia, 140 died from acute infections, 129 from hemorrhage, 97 died of embolism, and 49.5% died of heart disease. Therefore, septicemia, toxemia and hemorrhage—causes which are preventable—were responsible for 58% of the deaths. In 58% of the cases operative procedures had been resorted to.

With the above statistics before us, that speak for themselves, let us seek for measures to brighten the situation: (1) Better fundamental obstetric teaching in our universities. (2) More careful supervision of our residents, teaching them how to observe the normal.

How many instances do you see where the resident physician is only called just in time to put on his gloves and tie the cord. He, in his youth and enthusiasm, feels that to get anything out of his hospital training he must do forceps, version, episiotomies and all the operative procedures connected with the service. Unfortunately, in many institutions he is aided and abetted in his desire by carelessness of his superiors, either on the staff of the hospital, who are not doing special obstetric work, or by the courtesy staff if it happens to be an open hospital. He should be taught, first, the dangers of operative interference and made to observe the normal physiologic mechanism of labor, so as to appreciate when the normal is at fault, and to expect help when this mechanism is abnormal. The more he is made to appreciate the dangers of operative interference the better will be our maternal mortality, when he joins our midst as a practitioner.

*Prenatal care.* Here I wish to consider principally eclampsia and preëclampsia. From the foregoing statistics I am sure you are all convinced that cesarean section has no place whatsoever in the treatment of eclampsia. In most of these cases the child is dead from the toxemia or is premature and death occurs soon afterward. These cases are treated with greater safety to mother and child by early hospitalization, complete rest, dietetic and eliminative measures with induction of labor in the preëclamptic stages. If eclamptic, the

recognized procedures, such as morphin in massive doses, elimination by bowel and stomach, glucose, magnesium sulphate, and as normal a delivery as possible. Since 27% of our maternal mortality is charged to toxemia we would do well to increase our carefulness in prenatal care. Insist on the patient following directions as to diet, amount of water ingested, keeping the avenues of elimination open and strict attendance at your office as often as necessary to check the blood pressure and urinalysis. In your prenatal study be careful to eliminate all possible sources of focal infection. Remember we do not know the cause of eclampsia, and that all our efforts must be toward elimination and lightening the burden of the kidney and liver.

In hospitals with well regulated out-patient departments eclampsia is almost entirely eradicated; it is rare to see such a case but the incidence is just as great as ever. Therefore, this 27% of our mortality must be placed at the door of careless prenatal care and unsound surgical judgment.

*Unnecessary cesarean section.* As you listened to the indication for cesarean section in the Los Angeles statistics, did it not sound like a High School farce; picking out some of the high lights—fetal malpositions, old primiparas, sterilization, request, pyelitis, nervousness, dysmenorrhea, dead fetus, history of difficulties, no cause, no progress, cardiac disease, etc.? I am sure that out of 1322 sections more than one-half of them were not justified. When you realize that clinical experience has taught us that 60 to 80% of the labors in relatively contracted pelvis terminate spontaneously, you can lop off in a stroke 288 of the 488 done for contracted pelvis. Eliminate 233 done for eclampsia and preëclampsia, and about 400 for foolish causes, and the ever present desire to operate, and you will agree that my estimate of one-half is low.

With reference to complicating disease in pregnancy, the pregnancy in most instances can be disregarded and attention given to the treatment of the disease. Here again let me reiterate that cesarean section has no place in the treatment of eclampsia.

Cesarean section in the treatment of pla-

centa previa has a definite place. In central placenta previa it is indicated in all cases, primipara and multipara. In the marginal and lateral types the method of treatment is one of choice, especially in the multipara where we expect less difficulty in opening the birth canal. The condition of the cervix always guides our choice, if it is a long, hard snout-like affair and the baby alive, cesarean may show the best judgment. The condition of your patient is not the guide for your procedure. If she is in shock, treat her for that by intravenous injection of salt solution, glucose acacia or blood transfusion, before any operative procedure is undertaken. Simple rupture of the membranes with the jamming of the presenting part into the cervix is often sufficient to control the hemorrhage and labor terminates spontaneously. Statistics show that where cesarean is done in routine for all previas, fetal mortality is markedly raised, as so many of these infants are anemic from loss of blood and unless immediately transfused die within a few hours, whereas you have subjected the mother to more serious danger, from infection, especially if she has been examined vaginally or, as often is the case, has been packed with any and everything in the emergency. All cases of placenta previa should be hospitalized as soon as the diagnosis is verified, so as to treat the woman aseptically and guard against loss of blood, which in turn lowers resistance and favors development of infection.

*Malpositions.* The incidence of cesarean section is steadily increasing for this complication and is very unjustifiable. It is done for occiput posterior, breech, brow, face, transverse and every possible presentation. This incidence is due in great measure to the general surgeon, called in consultation, not being trained in obstetrics, who does the thing that he can do best—a surgical operation, cesarean section. In these cases it is better to consult the obstetrician who is trained in the mechanism of labor and who realizes that malposition is only one chapter in the patient's obstetric career. Cesarean section relieves the present situation but places the mother's life in jeopardy for all future pregnancies, as she

has a 14% chance of the scar rupturing. I am not blaming the surgeons, as he extricated himself with the best weapon at his disposal, but if fear of the patient being removed from possible hospital care or receiving inadequate medical attention was present in our conscience we would seek another way out, because a cesarean predicates future demands for the highest type of attention and skill. Here again the finger of accusation points to lack of prenatal care, for in a good prenatal clinic with examinations and palpation 2 or 3 weeks prior to delivery, you will detect the abnormalities when correction can be made, or if not corrected you know what you have to deal with and are prepared to carefully guide labor from the onset.

*Elderly primiparas.* The dangers and difficulties of labor in elderly primiparas have been greatly exaggerated, for statistics show that neither fetal nor maternal mortality is increased above levels generally accepted as normal and the average duration of labor is only slightly prolonged, while 20% of the women have strikingly rapid and easy labors. Dystocia may be expected in about 15% of cases, and in most instances it is not a true dystocia but a weak uterine contraction that fails to dilate the cervix. These cases are helped tremendously by Gwathmey analgesia where the painful inefficient contractions are relieved long enough to allow the real expulsive second stage pains to begin.

Development of the low cervical cesarean should lower this cesarean incidence by allowing patients to have a test of labor. If this is practiced most of these cases will deliver spontaneously. Many think that a test of labor is just so many hours. My idea carries with it, the condition of the patient, frequency and duration of the pains, their impression on the cervix, and whether they are of the expulsive or the hugging type. No definite length of time, 4 to 18 hours, but a careful personal observance of the patient during the test period, controlling nervousness and apprehension of the patient with sedatives and trying to ascertain her obstetric ability; placing no weight on the patient's outcry.

A certain percentage of cesarean sections



will always be done in these elderly primiparas. due to long standing sterility and the increased value placed on the child.

The foregoing shows that too many sections are being done. It carries a greater mortality and morbidity than any other clean abdominal operation. The mortality ranges from 1.8% in clean cases in which operation has been performed before the beginning of labor to 27% in cases in which forceps have failed and the membranes have been ruptured for any considerable length of time; while the morbidity ranges from 33 to 70%.

Now let us pass on to another cause of maternal mortality and morbidity and a high fetal morbidity—use and abuse of forceps and the abuse of pituitrin. The application of forceps still goes on, without any definite idea as to presentation or position of the presenting part to the vaginal canal. High, medium or low forceps, with utter disregard to the effacement and dilatation of the cervical canal, and a lack of any sense of disproportion between the presenting part and pelvic inlet. Only the other night I was called in consultation where forceps had been applied and slipped off 3 times, on an R. O. P. above the inlet, with the cervix uneffaced and only partially dilated; entire pelvic diaphragm eviscerated out of the vagina, bladder not catheterized, the cervix cut in 8 different places, and the fetal skull crushed. This in a young primipara, with a normal pelvis, in labor only 12 hours.

Forceps should never be applied above the pelvic brim and only in extreme cases when the head is in the mid-pelvis. Low forceps as your judgment and ability direct. All should be used with great aseptic care and emulating nature as much as possible. The arrested high heads should be converted into the anterior positions and allowed to descend. In the minor degrees of contracted pelvis the induction of labor 10 days or 2 weeks early gives excellent results, especially in multiparas.

Pituitrin is still given in massive doses—1, 2 or 3 ampules at a time in one labor; given when the cervix is undilated, when the uterus is already undergoing strong contraction; given without reference to fetal and pelvic

disproportion, causing ruptured uteri, cervical tears and hemorrhage, and increasing the fetal mortality by intracranial hemorrhage. Pituitrin should be used with great care and in minute doses, and only when labor ceases to advance because of uterine dystocia. After rupture of the membranes it should be used with extreme caution; never in disproportion of head and pelvis or in thick rigid cervices.

In conclusion, let me say that statistics show 90 to 95% of all labors terminate spontaneously, and that the higher the incidence of operative interference, whether done by the expert or the general man, the greater the increase in both maternal and fetal mortalities. Therefore, let us increase our prenatal care, be sure of our knowledge of the physiologic mechanism of labor, practice rigid aseptic technic, keep our conscience ever present, decrease our interference with normal labor by such instruments as forceps, version and pituitrin, and only use cesarean section after good obstetric consultation.

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## A FEW PROBLEMS IN MEDICAL ETHICS\*

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HARRY H. BOWLES,  
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I wish to express my sincere thanks to the members of this society for the kindness and coöperation they have extended to me during the past year. I know that I have not been so efficient as I should have been, yet you have all been so helpful and considerate that the cares of office have seemed more like a pleasure than a burden.

One must be bold indeed to dare a discussion of medical ethics. It has been worn so threadbare by repeated handlings that everyone raises an eyebrow when it is mentioned. Hence, lest your patience be too sorely tried, I shall make this reading very brief.

In the first place it has been, and can still be, said that the right sort of medical man needs very few rules of conduct, while the

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\* (Presidential Address at the Annual Meeting of the Summit Medical Society.)

wrong sort will be bound by no rules, however rigid they may be. In the last 35 years there has been tremendous progress in the practice of medicine, also in governmental structure and industry, so that many important things have happened to affect the relations of physicians to each other and to the public. One important phase to be mentioned is the employment of doctors by societies, which undoubtedly has a cheapening influence on the practice of medicine. Insurance and fraternal organizations frequently employ physicians to do family practice in a wholesale way. Corporations made up of laymen employ physicians, and advertise in a commercial manner to attract patrons. Many practitioners are listening to the siren voice of quick money, obtained with little expenditure of energy; thus presenting some new problems for medical societies to solve.

Where strictly mercenary organizations are concerned, we know the old rule of ethics applies directly. The problem is chiefly concerned with borderline cases, where, for example, a corporation employs physicians on salaries, supposedly to treat indigent cases yet not excluding those which should pay a physician's regular fee. The question which presents itself here is—can a physician aiming to be ethical become identified with such organizations?

Another problem is that of friction which sometimes occurs between physicians of health departments and the family physician. Neither is at fault, but trouble is caused as a rule by introduction of the newer methods of prophylaxis, vaccine therapy, and so on. Certainly there is some cause for debate as to where the duty of the Health Department ends and that of the family doctor begins. The problem requires tolerance and understanding for its remedy and no rule of ethics can govern it entirely.

To speak frankly it is common knowledge that a considerable portion of the people are not getting the highest type of medical service. And this is not because of a lack of kindness or altruism on the part of the profession. Medical men still retain the whole-souled generosity and charitable feelings they

have always had, and I think always will have to the end of time. The difficulty appears to lie in the fact that there is a lack of coördination between practitioners and health organizations. In the complex civilization in which we now live, individualism has given way to coördinated effort in other lines of community endeavor. The administration of public schools, the building of roads, the regulation of transportation, the regulation of food and drugs, by governmental agencies must meet with our approval. The interest of the government in prevention of the spread of communicable diseases, the control of water supplies and sanitary movements, is certainly to be commended.

Thus it would seem the government takes care of preventive medicine, the private physicians of curative medicine, and it is hard to draw a definite line between them. This small rift or lack of coördination of practicing physicians with health boards and other governmental agencies, some fear may be an exciting cause of ill-advised agitation for *state medicine*. We have all witnessed the spectacle of state medicine in Europe threatening to demoralize the whole practice of medicine. Some thinkers fear it may seep in here, though we hope not. I believe that state medicine would be disastrous for the profession in America and that we should be on the alert to nip it in the bud, should that become necessary. We should endeavor to coöperate with all local and state health organizations for the advantage of both sides. I am sure that the profession, so carefully trained as it is today, can cope with the situation. We have eaten of the fruit of the tree of knowledge. It remains for the present and succeeding generations to demonstrate that knowledge has been wisely used for the healing of peoples. We must cease to be individualists and must work in splendid coöperation for our fellow-men.

Before passing on from this phase of the subject, I merely wish to add that credit must be given to health boards for popularizing, through publicity, the periodic health examinations of children and adults. These examinations, incidentally, eventually add to the in-



come of private physicians. One state, to my certain knowledge, is trying to institute a system through its health boards, whereby the examination of children of preschool age may be gradually transferred from the domain of the school physician to the family physician.

The radio is now being used a great deal for broadcasting important news items to the world. Of course, it is employed in giving to the public many important facts regarding scientific medicine and the prevention of disease epidemics. It is perfectly proper for health officers to use the radio in broadcasting such news but what about the private physician in a similar situation? When the latter's name appears upon broadcasting programs, even if his meaning is good, he is subject to criticism in the medical family. However, if the occasion were to arise, so that it would seem necessary for one or more members of the practicing fraternity to broadcast, it might seem more fitting for the local medical organization to select the speaker or speakers, thus avoiding any embarrassment.

Another point to be mentioned, we have among the fraternity a few men (fortunately few) who seem to us to be rather heavily inclined toward the commercial side of medicine. These are often the gentlemen with the grand autos, the brilliant plumage, the well-curtained waiting rooms—in short all the “window dressing”. These are the gentry who call every abdominal pain appendicitis, every belch a gall-stone, every heart-burn, an ulcer. Their practice is large, their income huge, their cures miraculous, in the minds of their grateful patients. Again, we have the men, and often able men they are, who are endowed with multi-cylindered egos, flavored with avarice, and who exact the ultimate farthing from their patients. These fellows pretend to justify such practices by saying they have rendered unusual service, and that large charges impress the patient with the prestige of the physician. Such acts, of course, violate the ethics of practice as much as secret fee-splitting and reflect on the profession as a whole.

A little aside from or indirectly related to ethics, yet a phase which medical men should

be interested in, is the experiment which is being made to reduce the cost of medical care and hospital expense to the people of moderate means, who do not wish charity, who wish to pay a moderate fee but who cannot pay the regular fees of hospitals and high priced specialists. Of course, all fair minded medical men would charge but nominal fees to such patients, but what about the hospitals? In some of the larger centers efforts are being made to furnish such moderate wage earners with reasonable care, such as combined hospital and medical care at \$4 to \$6.50 per day. Recently there has been added the Baker Memorial wing of the Massachusetts General Hospital to take care of such cases. President Embree of the Rosenwald Foundation, at the dedication of the Baker wing spoke as follows: “Under conditions of poverty and dependence, charity was a virtue, a human necessity. Today the citizen of America does not require alms, he does not want charity. He wants and rightfully demands that in medical treatment, as in the other necessities of life, agencies be so organized that service will be good and efficient and costs correspondingly low. He demands this service be not doled out to him as charity but that he be allowed to pay a reasonable and proper cost. Under new conditions hospitals should cease to boast of their medical charity, they should take increased pride in striving to have all their services so organized that each patient, even the low wage-earner pays as he goes for what he gets.”

These words, bear in mind, were spoken before the great slump in business and vast unemployment came. And the Baker Memorial started with \$1,000,000 endowment and during the first 3 years the deficit will be one-half underwritten by the Rosenwald fund. It will be interesting to watch this and similar experiments.

In conclusion, I wish to say that medical men follow a code of ethics which originated in olden times. This code was constructed on the principle of fair dealing of doctor to doctor and doctor to patient. By holding to this code of ethics we can maintain the humanitarian standard on a high plane. In this talk I have meant to be entirely imper-



sonal and have not meant to infer that the tendency of modern medicine is as a rule mercenary. Perish the thought. The vast majority of the fraternity are splendid, ethical men; the exceptional ones are to be considered in some way, I don't know how. That will be the problem of the societies in the future. In the rapid progress made of late years in all lines of business and the professions it is strange that the adjustments have been so smooth as they have been. It is the duty of such societies as this to help in ironing out the rough spots and paving the way for a broader understanding of physicians to each other, to the profession as a whole, and to the public in general.

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## A BACTERIOLOGIC STUDY OF CHRONIC INFECTIOUS ARTHRITIS

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During the past year certain clinical and laboratory observations have been made in the Arthritis Clinic at the Hospital of St. Barnabas and in private practice, which seem of sufficient importance for at least a preliminary report. The clinic was started primarily for the study and treatment of chronic infectious arthritis (arthritis deformans).

Cecil, Nicholls and Stainsby<sup>1</sup> did extensive work on this subject. They isolated a streptococcus from the circulating blood of patients with chronic infectious arthritis in 61.5% in a series of 78 cases, which organism they considered a specific strain in 83.3%. They also found that streptococcus, culturally and biologically identical with the strain isolated from the blood, could sometimes be isolated from a focus of infection and in affected joints in the same patient.

Cecil's technic was duplicated and results similar to his were obtained in our laboratory. It was very difficult to get the organism started in primary cultures, as shown by the fact that an average of 17 days' incubation

was required in his series. One of our positives developed on the twenty-eighth day. There was always the suggestion on the part of critics that because the containers had to be opened so many times for subculturing we might be dealing with contaminations. Such a conclusion was highly improbable because we were getting a fair percentage of streptococcus growth of uniform type, only an occasional culture showed staphylococcus and diphtheroid organisms, and normal controls showed the same number of contaminants but no streptococcus. Furthermore, Cecil had thoroughly checked his work by animal inoculation and cross agglutination. However, *when we hit upon a modification of the media about 3 months ago which produced positives in the form of diffuse clouding of the media in 1 to 4 days without opening the bottles*, the criticism above mentioned was eliminated. This method which consistently showed more positives than any we had tried, and all in a comparatively short time, presented numerous other advantages from both research and clinical standpoints.

### CECIL'S PLAN OF CULTURING

The patient's arm is prepared by 2 coats of iodine and washed off with alcohol and 20 c.c. of blood is drawn from a vein in the arm and placed in 2 sterile dry test tubes (10 c.c. in each). These are placed in the ice box over night. The serum is removed, clot broken up, and the pieces of clot placed in each of two 100 c.c. bottles containing 50 c.c. of media. The bottles are incubated for 30 days and subcultures are made on blood agar every 5 days. The media is prepared as follows: Fresh beef heart is freed from fat and fibers, ground finely in a meat chopper and infused at ice box temperature over night, using 500 gm. ground meat and 500 c.c. tap water. Next morning the infusion is warmed to 20-25° and squeezed through a flannel bag. The filtrate is then boiled slowly for 1 hour and filtered through paper. It is then made up to volume and 1.5% peptone and 0.5% NaCl added. This is then placed in the Arnold, for 20-25 minutes to dissolve the peptone and salt. It is then titrated to pH 7.8 and placed in the Arnold for 1 hour. It is filtered through

paper and retitrated. If the pH has dropped it should be retitrated to 7.8 and put back into the Arnold for another hour. Then 50 c.c. of the media is placed in 3 oz. bottles and sterilized ½ hour in the Arnold for 3 successive days. It is titrated again and, if it has a pH of 7.6 or slightly above, it is satisfactory for use; if below 7.6, it is unsatisfactory. The finished product should be incubated several days for sterility.

MODIFIED METHOD

Preparation of the infusion is exactly the same as above. At the end of the boiling and filtering, 0.5% NaCl, 1% gelatin (Bacto), 1% glucose (c.p.) and 1.5% peptone (Wittes) are added. This is placed in the Arnold for 20 minutes and titrated to pH 8. It is then placed in the Arnold for 1 hour and retitrated. If below 7.8 it is adjusted to that figure and placed in the Arnold for an hour. It is filtered through paper. It should not be below a pH of 7.8 before placing in bottles. The bottles are prepared beforehand by placing about a teaspoonful of calcium carbonate (c.p. powdered) in each of them, plugging with cotton, or cheese cloth and cotton, and sterilizing in the dry sterilizer for 1 hour. In these sterile bottles 50 c.c. of the media are placed and sterilized in the Arnold for 30 minutes on 3 successive days. At the end of 3 days it is titrated and if the pH is 7.6 to 7.8 it is satisfactory. It usually shows a pH of 7.7 to 7.8. The calcium carbonate helps to keep the media from becoming more acid while being sterilized. If the pH is correct it is placed in the incubator for several days and if sterile is then ready for use.

DESCRIPTION OF THE ORGANISM

While the growth is young, long chains are formed which cloud the whole medium. As the culture gets older this clears and the organism breaks up into small chains or even diplococci and settles to the bottom of the container. Initial transfers into brain broth (Difco) or blood brain broth show the same characteristics. Transfers into a meat infusion medium (plain broth) form sand-like flakes which adhere to the side of the tube or settle to the bottom leaving the medium per-

fectly clear. After several transfers in this plain broth the organism diffuses through the medium, producing a uniform cloudiness. Long chains which appear in cultures of an enriched medium, such as brain broth or gelatin dextrose broth, each chain sometimes containing as many as 30 to 50 cocci, break up after 24 to 48 hours. The chains are much shorter (6-12 cocci) in plain broth but do not break up until 60 to 72 hours have elapsed. After several transplants the organism tends to grow uniformly in chains of 6 to 12 cocci. On blood agar there is a very delicate growth which shows a definite production of methemoglobin. This is a very pale green and does not diffuse into the medium but is beneath and immediately surrounding the colony. The colony itself is a dirty grayish color. There is also a small zone of partial hemolysis surrounding the colony after 48 hours incubation which is much more pronounced around the colonies deep in the medium.

BLOOD CULTURES FOR STREPTOCOCCI

Clinical diagnosis	No. Cases	No. Cultures	No. Neg.	No. Pos.
Normal individuals	5	5	5	0
Chronic ulcerative colitis	2	2	2	0
Acute appendicitis	1	1	1	0
Hypertension	1	1	1	0
Purpura hemorrhagica	1	1	1	0
Carcinomatosis	2	8	8	0
Diffuse peritonitis	1	1	1	0
Septic abortion	2	2	2	0
Typhoid fever	1	3	3	0
Cavernous sinus thrombosis	1	2	1	1
Malignant endocarditis	1	4	2	2
Acute peritonsillar abscess	1	1	0	1
Agranulocytic angina	1	3	2	1
Myositis	1	1	1	0
Sciatica	1	1	1	0
Gonococcal arthritis	2	3	3	0
Hypertrophic arthritis	5	13	13	0
Subacute osteitis	1	1	0	1
Chronic infectious arthritis (Fluid from knee joint)	2	2	1	1
Chronic infectious arthritis (blood)	37	59	34	25

The above table includes febrile and non-febrile conditions as controls. The malignant endocarditis and quinsy cases showed positive growths of streptococcus which could not be culturally differentiated from the "arthritic" strain. The positive culture in the case of cavernous sinus thrombosis was a typical *Streptococcus viridans*. The patient suffering with agranulocytic angina had a septic throat and pyemic abscesses. Hemolytic streptococcus was found in the blood culture.

The subacute osteitis case was of unusual interest because of its close clinical and bacteriologic relationship to the infectious arthritic group. The patient complained of moderate pain in the lower thigh for about 4 months, had a low grade temperature and radiograph showed thickening of the bone. Three diseased teeth were extracted soon after the onset. Vaccine was prepared from the "arthritic" type streptococcus isolated from the blood. The streptococcus recovered from the knee fluid was identical, culturally and morphologically, with that recovered from the blood stream and occurred in one of the cases listed under chronic infectious arthritis, a woman of 56 years who gave a history of arthritis for 15 years and was badly deformed.

The chronic infectious arthritic group of 37 cases in which 59 blood cultures were taken showed a positive growth of the "arthritic" streptococcus in 67.6% of the cases and 42% of the cultures.

The cases placed in the above group showed many variations but were sufficiently typical clinically to be so classified. They all had multiple arthritis, most of them typical fusiform swelling of the smaller joints and many had deformities. The youngest was 14 and had suffered involvement of the joints of the hands and feet for 4 years (Still's disease). The oldest was 75, the average age 44. The duration of illness was from 3 months to 25 years; the average duration being 5 years 2 months; 29 were females, 8 were males. Several cases classified as chronic infectious arthritis showed interesting variations. Two patients, a woman of 40 and a man of 60, had severe bilateral rheumatic iritis which developed prior to onset of arthritis. Both gave histories of severe sinusitis. One patient of 29 first noticed pain in one finger, developed tenosynovitis with a "trigger" finger and subsequently typical arthritis. Three gave histories of rheumatic fever or allied conditions in childhood; 2 of these had definite attacks of rheumatic fever, 1 had chorea and myositis. All had rheumatic cardiac signs. In 1, interphalangeal joints of the hands showed fusiform swelling typical of early deforming

arthritis, while the other 2 had multiple deformities. Two showed "arthritic" streptococcus in blood cultures. We are not in a position to determine whether the rheumatic fever infections or secondary infections were the etiologic factors in these cases.

Of the chronic infectious group, 30% showed definite foci in teeth, tonsils or sinuses. In the hypertrophic group no history or evidence of foci were found.

Cecil<sup>2</sup> recently stated that patients with typical chronic infectious arthritis show high agglutination for the typical arthritic strains in 94% of cases. This would be important not only in proving the specificity of the organism for this type of arthritis but also in differentiating border-line infectious and non-infectious types. We have examined most of our cases for agglutination of these organisms and find that many of the bloods show a positive result to a high titre. However, no further report of this phase of the work can be made until proper controls are carried out.

Chronic infectious arthritis is undoubtedly due to a streptococcus infection of the joint tissues caused by a blood stream infection from a primary focus such as the sinuses, teeth and tonsils. Probably some patients control foci in the joints without any treatment, others apparently recover when the primary focus is removed, but the great majority do not control the secondary foci in the joints and steadily or intermittently progress toward deformity and invalidism.

Vaccine therapy has been persistently used in the belief that it would have a specific action on the joint infection. The vaccine was prepared from the "arthritic" streptococcus isolated from the patient's blood or from primary foci, or both, or from typical strains in case an autogenous vaccine could not be obtained. A primary dose of 200 million was given, increasing that amount each week until 2000 million was given as a maximum dose and that amount was continued indefinitely unless a reaction occurred. Because of recurrent attacks in 2 patients while on this regimen, focal or general reactions were considered indications for reducing the dose. The most important single observation regarding



vaccine therapy was that it must be used for a long period of time. One must have a great deal of confidence in this method of treatment to encourage patients to continue injections for months with little or no apparent change in the joint picture. But we have been repaid for persistence in many instances by a sudden improvement which progressed to an apparent cure.

However, one should not expect too much from vaccine alone. Some patients are acutely ill and require hospitalization. A large number are poorly nourished and require a high caloric diet. Two patients who had insufficient vitality to respond to vaccine or anything else were given initial transfusions. Many patients find it necessary to continue work, using up every ounce of their reserve, when they deserve long continued rest. Fatigue should always be avoided. A warm, dry, equable climate is ideal. Although we are particularly interested in prevention of deformities through early and possibly specific treatment, there are thousands of crippled people

who could be infinitely improved through proper physiotherapeutic and orthopedic treatment. They cannot receive adequate treatment at home and there are few hospitals for the care of such patients as cannot afford a private sanatorium.

It is obvious that because the group of cases treated was small and because of the short time they have been observed no final conclusion can be made until a later date. Nor would we venture too far in making conclusions regarding the cultural study, but we do feel that the method above described for the quick growth of organisms from the blood of patients suffering from chronic infectious arthritis is of sufficient importance to be brought to the attention of other workers at this time.

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### TODAY

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Yesterday, I know not how,  
I slipped out from Then to Now.  
Such a world before me lay,  
Growing fairer every day,  
'Til this morn I pause to count  
All my wealth—a vast amount:  
Friends, the love that round me lies,  
Flowers and birds and sunset skies,  
Memories of what hath been,  
Hope for days that wait unseen;  
But the best in every way  
Is the gift of each new day!

Every morn for me it waits,  
When I drift through sleep's dim gates.  
None may hasten, none delay,  
None may spend it—My Today.  
So this little prayer I raise  
For today and all the days:  
Joyfully may I fare forth,  
Make each swift day full of worth,  
Work and love and pray and *live*  
And myself for others give.  
So may life be richer when  
I am sped from Now to Then.

Frances C. Hamlet.

## Special Article

### MEDICAL TRAVEL TALK

#### A Physician's Vacation in Ireland, England and France

Henry O. Reik, M.D.,  
Atlantic City

Physicians find it more difficult than any other class of workers to take a real vacation, if by that word one means putting aside thought of the daily occupation, for the practice of medicine is not only a noble profession but a very exacting one, and when one becomes wedded to it he finds himself bound to a jealous mistress who demands constant attention.

and explorations. A short post-graduate course of study may be made to serve the purpose of vacation, as may also attendance upon some national or international medical convention. Or, inasmuch as travel has both a vacational and educational value, even an informal trip into distant states or other countries may prove profitable if combined merely with observation, from a medical point of view, of the habits and customs of other peoples. It was with some such vague idea in mind that we planned this summer's vacation; we had no desire to listen to the reading of scientific papers, nor to attend clinics, but we believed it might be possible to pick up some information concerning the working of national health insurance laws—sometimes referred to as *State Medicine*—while at the same time enjoying the delights of travel, and,



Fig. 1. Village Dispensary. District medical service to the poor; under a very old law.

On the other hand, no group of workers deserves more than physicians or is in greater need of periodic vacations, if by that term we mean a surcease from routine labor and substitution of new scenes and thoughts. Properly speaking, vacation should embrace change of climate and variation of mental activity, rather than complete cessation of labor, for it is from changes that one procures that bodily rest and cerebral stimulus which tend to restore healthy vigor. Thus we may find a happy medium, between complete loafing and constant work, fitted to the conditions that affect most medical practitioners. The physician can take a rest from his usual routine of labor and yet continue in touch with some of his vital interests; can do this perhaps better than other workmen because there are so many fields into which he may extend his studies

further, to secure some interesting pictures of foreign medical institutions. So, we took along a "Filmo" and proceeded to record some moving events.

In the beginning let us say that the often heard excuse—"I can't afford it"—is not a sound reason for not taking an annual vacation. No man who is doing or wishes to do high class professional work, and that should apply to all physicians, can afford *not* to take an occasional vacation. Few better investments exist, for the profits—renewal of energy and preservation of health—are certain and immediate. Nor need the cash investment be very large. True, travel is more expensive now than in former times, just as the cost of everything else has increased, but it is not sufficiently high to be out of reach of the average practicing physician provided he is



willing to travel on a moderate basis. Consider, for instance, a European trip embracing visits to great medical centers, whether for clinical study or simple observation of institutions and passing events; a vacation of 2 months duration can be financed on less than \$1000, with due allowance for living in first class style; a single month of absence from home, which covers 2 weeks on the ocean and 2 weeks abroad need not cost more than \$600. Of course, if one feels it necessary to travel on the "ocean greyhounds" and to command all the luxuries of the most fashionable liners, more money can be expended; but such a course of action is by no means necessary to a beneficial vacation. We have crossed the Atlantic many times, and have tried all types of boats, and experience has resulted in the

jumping off from Baltimore, in the County of Cork, the southernmost point of Irish land, and landing in Baltimore, Maryland. It happened that our ship landed us not far from the northern extremity of Ireland, i.e. in Belfast, so we had to traverse the entire length of the country. We are not inclined to recommend booking to Belfast unless you have some very special reason for so doing. However, the fact that we sailed around the northern coast and close enough to procure a good view of the land in the late afternoon and early evening hours, compensated in some measure for the discomforts of landing; for the ship was anchored in the Irish sea and we were sent ashore on a ferry-boat which consumed 2 hours passing up the bay and river, to put us on the dock at 3 a. m. Sunday. It is far more



Fig. 2. Merrion Square. Specimens of doorways. American Consulate at right.

conviction that the greatest comfort and satisfaction are obtained from the modern "cabin" boats; such ships as the Samaria, Carmania or Aurania, of the Cunard Line, and the De Grasse or Lafayette, of the French Line, offer all the necessary conveniences, perfect comfort and excellent food, and are in some respects preferable to the larger boats of the same companies. The round trip can be made on any of the boats named for \$300 to \$500, according to size and location of room, and, \$10 per day is ample allowance for the time to be spent on shore. Remember this when preparing next year's budget.

Having on previous voyages neglected Ireland, we determined to commence this time with that country; partly because we had a desire for new sensations, and partly because our maternal great-great-grandfather migrated from the Emerald Isle 150 years ago—

comfortable to enter Ireland by way of Queenstown (Cobh), where facilities for landing are much better.

Belfast has few attractions for the tourist; in fact, we can think of none except that it constitutes a good approach to the Giant's Causeway, if you care to visit that freak of nature, and that a side trip can be made by auto-bus over a beautiful driveway which follows the northeastern coastline for a considerable distance through County Antrim—a road running along the edge of the cliffs much as our own Hudson and Bergen County Boulevards follow the course of the Hudson River along the Palisades. Belfast is essentially a commercial city, in the midst of a manufacturing district, and except in the newer residential portion has a drab appearance, though the public park and suburban area redeem this to some extent. The surrounding country is



charming, but that can be said of practically every square mile of Ireland. From the first glimpse of green behind the rocky coastline, to the farewell view as we crossed to Wales, we were conscious that the sobriquet—Emerald Isle—is most fittingly applied. No *green* we have ever seen has been greener, and no land we have yet seen offers anything superior to the fertility of Ireland's soil. Everywhere, from north to south, from east to west coast, the land is a rolling terrain, and everywhere it is covered with a luscious growth of plant life; a sight to please anyone with a countryman's soul and a farmer's eye.

Across the boundary line into the Irish Free State and we entered Dublin. The austere, sombre appearance of Belfast gave way to the contrasting brighter and gayer

modern American cities; and we were soon to discover that in Ireland it is the general custom. On our first car ride, we requested the conductor to tell us when we should be arriving at the point nearest to Dublin Castle. After some little time, a gentleman leaned across the aisle and said: "I heard you asking for Dublin Castle. If you will get off at the next corner, where the car will turn, walk one square farther on this street, and then turn to your left, you will be facing the Castle." This was kindly intervention, for the conductor would probably have forgotten us because of other demands upon his time. On other occasions, when asking for information, people put themselves to considerable trouble to render assistance. Such experiences naturally led to conversations from which we



Fig. 3. Ruins of the Castle from whence came the Donohoes.

capitol city of the recently organized Irish Republic. The fact was brought strikingly to our attention by the coincidence of making our advent at the same time as the first French Ambassador to Ireland. An American Ambassador was installed some time ago, and while watching the procession attendant upon the French Ambassador's reception, a kindly Irish gentleman gave us an interesting discourse on the local political situation, and, also, a lesson in Gaelic. And right here let us take advantage of the opportunity to say that nowhere else in the world have we met such uniform courtesy as we found throughout Ireland. Our first surprise came upon entering a crowded street car, and observing that the passengers moved to make room for us to sit down; such a delightful contrast to conditions in

gleaned valuable knowledge in addition to what we had originally sought. Also, some of these experiences were amusing as well as interesting, for the Irish wit found abundant chance for display.

Our Gaelic friend, while watching the ambassadorial parade and discussing various subjects, drew for us a comparison with relation to the Irish Free State's desire to take life easily, saying: "We are not inclined to rush and hurry, but prefer to take things slowly. I had a friend, of about my own age, who was always urging me to be more energetic and do more business. He was not satisfied with business life in Dublin, and so he went to Belfast and then to London, and he worked hard, and he succeeded in making money and building up a large business, but—he has been

*living in a cemetery for 10 years, and I am still hale and hearty."* And he was a remarkably well-preserved, patently successful man considerably beyond the allotted three score and ten years of age.

From the medical point of view our interest in Dublin centered in Trinity College and we spent most of our first day inspecting that institution. Trinity is, as you probably know, one of the world's notable universities, and dates from December 29, 1591, when it was established by royal permission of Queen Elizabeth. One of the chief points in estimating the success of any form of government is found in the attention paid to the subject of education, and we were interested to learn the plans of the Irish Free State in this respect. The Irish Times of Saturday, Aug-

(generally spoken of as Trinity College), is of recent birth—only about 20 years old—and has not yet attained any particular renown. It is the present policy of the government to insist upon the study of Gaelic in all the public schools; an order that seems to have greater sentimental than practical value.

Trinity, with its 340 years of growth, has become an institution of imposing appearance and great national importance. The grounds form a lovely park and the buildings are pleasing from an architectural aspect, but the Library is the center of attraction to anyone at all interested in educational affairs. Like Oxford and Cambridge, this University has always received under British law a copy of each book published in the United Kingdom, so that its library contains today more than



Fig. 4. Lake Killarney at twilight.

ust 9, carried an explanation of the public school system: compulsory school attendance up to the age of 14, when a "Primary School Leaving Certificate" may be obtained upon satisfactory passage of an examination; secondary educational curriculum providing for "Intermediate Certificates" after 2 years' further study (showing ability to take up advanced work or to enter technical schools) and final "Leaving Certificate" at the close of another 2-year period; and, "Honors Certificates" when pupils' marks justify the award. The leaving certificates have a definite value inasmuch as they are accepted for matriculation in the National University of Ireland, and accepted with certain qualifications for entrance to Trinity College. The National University, which, by the way, must be distinguished from the University of Dublin

300,000 volumes of exceptional value for reference purposes. Then, claim is made locally that the most valuable book in the world is in the possession of this library; that is, the famous Book of Kells, a marvelous piece of illuminated text of the gospels, the life work of one monastic scribe in the eighth century. This book is carefully preserved and is under supervision of a special caretaker; each evening it is placed inside a steel vault, and each morning is opened at a new page and placed in a glass case for the inspection of visitors during the day—the opening at a different page daily being designed to avoid too prolonged exposure of any given page to the effects of daylight.

Trinity is located in the very heart of the city, the entrance being directly opposite the old Parliament House, which is now used as



the head office of the National Bank of Ireland, and the chief buildings are ranged along the 4 sides of an immense quad the center of which constitutes a small park containing many beautiful old trees. There is an inner court, containing dormitory buildings, and at the distant end of the outer quadrangle stands the Medical School with its anatomic and physiologic laboratories. In 1654 the College of Physicians was established in connection with Trinity College, and this connection is still maintained in the choice of professors for this medical school. The medical school buildings are not very ancient but they were undergoing reconstruction during the period of our visit and the Sunday paper contained the following interesting and witty news item:

structure to the sister association buildings in London. It might be mentioned, too, that the British Medical Association has a separate branch for Ireland, with a resident secretary and office in Dublin; but of our visit to that institution we will speak later.

The region between Trinity and St. Stephen's Green, embracing both Kildare Street and Merrion Street, is rather fashionable and contains many fine old houses that intrigued us because of their beautiful front doors. Perhaps the greatest mark of distinction about the external appearance of an Irish home is the portal of entrance; the architectural beauty of the facade hangs particularly upon this feature of the plans and many of these houses have doorways of striking character. The doors are made of fine woods, mahogany



Fig. 5. Typical Irish Village Market Day.

#### A WARM TIME COMING

"For some time now workmen have been busy at the medical school, putting in new heating apparatus. A new boiler of formidable proportions was taken in through the front door—various walls and windows having to be demolished to permit its passage—and duly lowered into the depths. In connection with the complicated arrangement of engines of torsion and leverage, which were rigged up to get the boiler into its new home, a curious incident occurred. A steel cable stretched some 6 ft. above the path smashed the windscreen of the car of Dr. E. J. Watson. Had Dr. Watson been decapitated, as he so nearly was, the Rugby Club would also have lost its head; for he is its President."

We were interested also in visiting the very old homes of the Royal College of Physicians, on Kildare Street, and the Royal College of Surgeons, on St. Stephen's Green, 2 of the finest buildings in Ireland and quite similar in

predominating, and the woodwork, as well as the brass knocker, is kept in a state of high polish. Furthermore, they are protected from the effects of inclement weather and the sun's heat by canvas covers that may be adjusted as seems necessary. The fan-shaped transoms, behind which in some instances one observes a marble statuette of some animal or the bust of some distinguished man, add to the interest as well as the beauty of these entrances.

Leinster House, once the residence of Lord Edward Fitzgerald, is now used as the meeting place for the Irish Parliament. It is flanked on either side by the National Library and the National Museum; the 3 buildings forming 3 sides of a hollow square. Old Dublin Castle, for many centuries the center of political authority, is now being used as a



temporary home for the High Courts and as offices for other divisions of the government pending reconstruction of the buildings partially destroyed during the revolution.

On the occasion of our visit to Dublin Castle, we had an unique experience. After having been shown through most of the galleries and some of the rooms that are not ordinarily opened to visitors, our guide took us into the court chamber where a case was being tried and extended the courtesy of following the proceedings so long as we might be interested. The most impressive feature to us was the manner in which the trial judge endeavored to dispense *justice*; a striking contrast to some court scenes we have witnessed in this grand and glorious United States. The case under

concerned." Here was a judge ready to push aside *technicalities*, in order to effect a full measure of *justice*. Certainly a pleasing sight in these days.

Our wish to photograph many interesting and historic spots in Dublin was interfered with by weather conditions. During the first morning of our stay in the city we started out with camera in hand but found a shower of rain and returned to the hotel room for an umbrella. As the elevator descended with us for the second time within a few minutes we apologized to the operator for not having properly prepared ourselves at first, and then asked whether it rained often in Dublin. His answer was: "An umbrella is a useful thing to have, sir, in Dublin, for you will

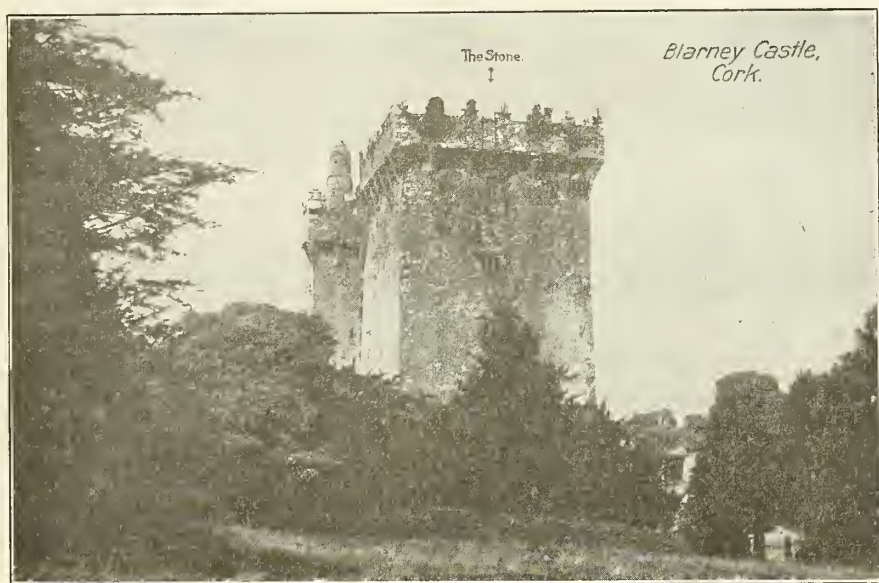


Fig. 6. View of Blarney Castle; indicating location of the famous charmed stone.

consideration concerned the disposal of property left by some one's Last Will and Testament, and the administrator, some fiduciary company, was trying to force all of the legatees to comply with orders of his own. The attorney for the plaintiff had explained the situation and requested an order of the court to compel obedience. The judge listened attentively and then said, in effect, something like this: "Before calling upon the defense to reply, I think I should say to you, sir, that I realize you are trying to take advantage of a technicality of the law, and that while you may have a legal right so to do, I am not inclined to grant your request, for the simple reason that such a decision would possibly work great injustice to some of the parties

meet another shower about every second street crossing." His words proved to be quite true not only for Dublin but for all of Ireland during the 2 weeks we spent there. If we can feel that it is a beautiful, charming country, in face of the continuous wet and cold weather of this past summer, it must be something wonderful to see during a sunshiny period. The Killarney lake region seemed to us deserving of all that Tom Moore wrote and that John McCormack sings about it; veritably, "a little bit of heaven". The nearest comparable thing in America, in so far as we can recall, is Lake George, but much as we love this favorite spot, we are compelled to admit that Killarney possesses even greater charm. There is a bewitching beauty, a poetic

softness and delicacy, about Killarney that is all its own, and we earnestly recommend it to you for a short visit, or a prolonged sojourn, according as you can afford the time; but *do go there sometime* during your life if only for a fleeting glimpse. One can make, as we did, a very delightful circular tour from Dublin to Killarney, thence to Glengariff and other points on the south coast, across to Cork and up through Tipperary to the capital city again, and every mile of the way will be enchanting.

In the cities, and in every town through which we passed, generally close to the town hall or to the church, we observed Public Dispensaries, and our first thought was that these

its application to the 3 northern counties that remain a part of Great Britain. This information, with much more of interest, was obtained through 2 very pleasant hours spent with the Commissioner of Health of Dublin, Dr. Russell, and the Secretary of the Irish Section of the British Medical Association, Dr. Hennessy. Dr. Russell had visited the United States 2 years ago when the Rockefeller Institute conducted a tour of foreign public health officers to study American methods, and Dr. Hennessy had practiced medicine in England before and for a time after adoption of the National Insurance Act, so we were able to secure considerable authentic information concerning medical conditions; facts

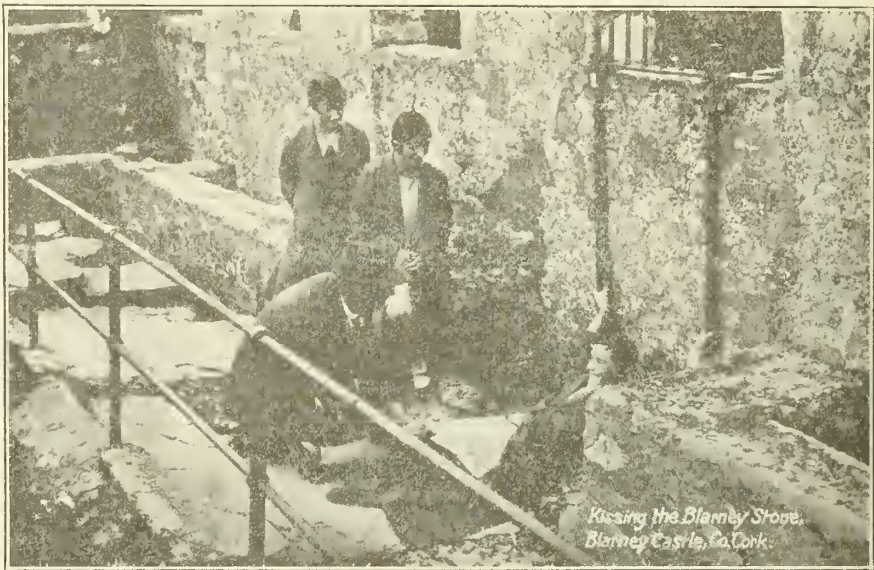


Fig. 7 Kissing the Blarney Stone consists in hanging head downward into the opening and placing the lips against the under surface of the basic stone in that portion of the outer wall at the end of the iron bars. One has to hold firmly to those bars, and it is advisable to have a friend hold the kisser's feet, to prevent an accidental fall resulting from dizziness.

were part of a national health insurance plan, but upon inquiry we discovered that under a very old law of the country free medical service is provided for the poor, and each district of a certain size has its own dispensary, the attending physician being a paid, part-time, official with the privilege of private practice. The British Health Insurance Act was meant to cover Ireland along with the rest of the United Kingdom but in Ireland it met with even less recognition than our national prohibition law has been accorded in some of the states; in fact, throughout Ireland, it was simply ignored until 1928 when action by the League of Nations resulted in

which will be utilized for discussion at a later date. While we were in Dublin, however, the Irish Times published the following item:

#### MEDICAL BENEFITS

The Irish Medical Committee has passed a resolution drawing the attention of the Saorstát (Irish Free State) Executive Council to the establishment of a system of medical benefits in Northern Ireland, and suggesting steps be taken to provide medical treatment for insured persons in the Free State, preferably by the establishment of a national medical service on the terms suggested in the Majority Report of the Committee of inquiry on the National Health Insurance and Medical Services.

(To be continued)



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if:

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## THE PRESIDENT'S NEW YEAR GREETING

The President of the Medical society of New Jersey takes pleasure in greeting the membership in the New Year. He extends his best wishes for a year filled with the joy of work well done. He hopes the Great Physician will shower blessings upon the membership and give them wisdom to cope with the serious problems with which they are faced.

To the Womans' Auxiliary he pledges his interest and support in its noble and unselfish efforts to aid in promoting the aims and objects of the Medical Society of New Jersey and to serve as an ally to that organization in developing its program of health education and public welfare.

George N. J. Sommer.

## FRACTURES AND THE COMPENSATION LAW

In the December Journal we published an interesting discussion of the practical working of the Workman's Compensation Law, started by Dr. Sherman's paper on Eye Injuries. This month we present an excellent corollary to that review, in the papers by Drs. Adams and Martin, on Fractures and Traumatic Surgery, and the accompanying discussion. Taken together, these contributions pretty nearly cover the complications and difficulties that interfere with a smooth working of that law. You will profit by reading the matter in its entirety.

We may at the same time report that a special subcommittee of the Welfare Committee is now engaged in studying a plan for smoothing out all the disagreements that so commonly arise between physicians and compensation insurance companies.

## A PROBLEM SOLVED. IOWA PLAN OF SECURING PAYMENT FOR SERVICE TO THE COMMUNITY'S INDIGENT SICK

The Annual Conference of State Society Secretaries and Editors, held at Chicago in November, provided this year some discussions of exceptional interest. President Sommer accompanied your regular representatives, and in the Department of Communications you will find a letter from him relating his impressions. The Department of Lighthouse Observations is also being utilized this month for presentation of a summary of one of the most important papers read at that conference; a paper dealing with the relations of the medical profession to the public, and especially to the much talked about problem of *state medicine*. It remains for us to direct your attention to a paper presented by Dr. Robert L. Parker, Secretary of the Iowa State Medical Society, under the title, "The Best Method of Caring for the Indigent Sick".

During a visit to one of our county societies recently we heard a somewhat heated discussion concerning the relationship between the local physicians and the Board of Freeholders, with special reference, apparently, to



the disinclination of county authorities properly to compensate physicians for services rendered to the indigent sick. Furthermore, a situation was reported last month by the Essex County Medical Society, indicating that the Newark City authorities and the county society are endeavoring to reach an agreement whereby the city's indigent sick will be properly cared for and the physicians will be paid for services rendered. The Iowa plan for providing adequate medical services to impoverished citizens, securing to physicians payment for services rendered, and avoiding disputes, seems to us peculiarly applicable to some of our own county conditions.

Briefly stated, the Iowa plan provides that the county medical society shall make a blanket contract with the county authorities, under which the latter will pay annually a fixed sum to the society in return for proper medical care, by members of the society, of all the indigent sick in that community. Such medical attention is to be supplied upon orders of the freeholders (or whatever may be the official name of the county authority); and such service is divided among members of the society on as nearly an equable basis as possible. The total annual payment goes into the society treasury, to be disposed of as may be determined by the organization: members may be paid out of this fund for services actually rendered; the unexpended balance may be used as the society sees fit; or, members may contribute their services without pay and permit the society to utilize the entire fund for the benefit, in some other form, of all its members. Consonant with the last mentioned device, some of the Iowa counties have found this money sufficient to relieve members of the entire burden of dues to county, state and national societies; some propose using the growing fund to establish an endowment; some purchase insurance and indemnity policies for all members, on the group basis; and some use all or part of the fund for bringing speakers from a distance, thus relieving the program committee of a burden, or for conducting post-graduate courses.

The income of the county society, from this plan, varies in accord with the population of

the county; and the sick demand varies with its percentage of indigent citizens. In Iowa, the plan has been tried for a few years in 11 counties. The population ranged in these counties from 16,000 to 63,000, and the contractual payments ranged from \$1600 to \$12,600. In general, the obligation was to furnish full medical service, including major surgery when necessary, and medicines and supplies except serums, antitoxins and salvarsans. It will be noticed from the above figures that the smallest county paid on the basis of 10c for each member of the total population, while the larger county paid upon the basis of 20c. The total population of the 11 counties being 316,201, and the total amount of money paid into the 11 county medical societies \$36,530, you will observe that the average payment was upon the basis of a trifle over 11c per citizen. The membership of the smallest county society numbered 10; of the largest county, 86; the average being 36. As the total registered membership was 370, and the total fund \$36,530, the average allotment for each physician might have been a little less than \$100.

In some of the counties the work was performed by assigning patients to the nearest physician; in some instances arrangements were made whereby members of the county society rotated in service; in some counties the patient was permitted freely to select his own physician from the county society membership.

As indicated, the plan worked admirably in so far as it has been tried in the state of Iowa. It has resulted in physicians being paid for services rendered to the indigent sick, just as other services and supplies to such citizens are paid for by the community; thus eliminating the injustice of placing upon physicians alone the burden of caring for the sick poor. It has further resulted in a general satisfaction of the community with its physicians through this supplying of effective medical service to the needy, and it has also resulted in the removal of friction between physicians and local boards of supervisors and social workers. Finally, it has served to provide the county society with much needed funds to carry on scientific or educational work.

## Economics

### THE OPEN HOSPITAL

William H. Ross, M.D.,

President of the New York State Medical Society,  
Brentwood, Long Island, N. Y.

There is no other practical way of bridging the gap between the time of a doctor's graduation in medicine and the present day knowledge, than by experience in a hospital. Practically, this is possible for all of the profession in an open hospital. Much has been written about the merits of an open or closed hospital but considering the educational influences on the profession, an open hospital is of greater community value. In no other way can the profession be kept in the proper state of education regarding modern medicine than by continuous education in its own environment. It is not the primary obligation of hospitals to undertake to make specialists and it is the obligation to train the 80% of the profession who are general practitioners and who attend to that percentage of care of disease.

If those who manage hospitals do not make them available in some way to the entire profession for practice therein, so as to benefit by the education that flows from them, we are not protecting the public, by making good doctors, from that ever present tendency of the human mind to credulity and the unusual nor are we developing availability of the science of prevention and cure of disease—an ideal that came to the front in the initial meeting, in 1807, of the Medical Society of New York State when it offered a prize greater in value than its then entire financial resources for the best method of prevention and cure of Typhus Mitior.

I believe that with the 1,000,000 hospital beds in 9000 hospitals and the increase of 127% in hospital facilities in the last 20 years, the time has come when every doctor should have a hospital connection under some plan. A hospital does much for a community. It sets up an advanced standard of practice. In addition to making better doctors it becomes a real source of education to the public and steadily breaks down medical ignorance, the greatest foe of public health advance.

Medicine has done much for human welfare and for civilization, and the education that flows from a modern hospital can continue this and make it the greatest modern

factor in advancing these age-old functions of the profession of medicine. In New York City and its metropolitan area, the educational advantage offered physicians seems considerable when we realize that 51% of doctors have hospital or out-patient service, 16% of the remaining are either retired or engaged in other phases of medical work, leaving 34% who are without institutional appointment, but since there are in New York City 10,877 physicians, 3698 are by the present system of hospital service largely deprived of the opportunity of continued education. The only important difference that I know of in the medical situation in New York City is that there is 1 physician for 550 people and in the rest of the state the average is 1 for 793 people. You may draw your own inferences regarding professional attitudes toward clinics, health centers, and the economic situation, and efforts to improve it.

The question arises—is organized medicine meeting its obligation to provide the best kind of physicians that it can; and right here I would like to say that which I have said on several occasions this year, that it is time for organized medicine to self-appraise its own organization and offer proposals for the solution of problems that government has taken on in 23 other countries, if the profession is going to avert more *state* medicine.

The rural hospitals of New York State are generally open hospitals and their standards of practice are good. Human nature is about the same in rural as in urban sections. If an open hospital brings about arising of the level of professional ability of practicing physicians and prevents a loss of professional prestige, and gives the patient the right to select his own physician, insuring personal interest and responsibility for his welfare, then it is worth trying in cities and the few remaining places in the country under the guidance of medical statesmanship with rules, regulations, and penalties for enforcement of standards to see if it does not work out as well as it now works in many small communities in New York State doing work equal in results to the average city hospital. My experience in hospital organizations makes me believe that the essential control is compulsory staff conferences to review the catastrophies and to record the story of diagnosis and treatment, so that a strange doctor reading it would understand the case, and, then to file the record so as to be easily accessible for study.

Sometimes I think that perhaps our own profession is dividing itself into 2 classes—one the conservative, guided by tradition; the other the liberal, interested in human progress.

## Collateral Reading

### THE FUTURE OF FREUD

#### The Structure and Meaning of Psycho-analysis

By William Healy, Augusta F. Bronner  
and Anna Mae Bowers

(Reviewed by Joseph Jastrow in *Saturday Review of Literature*, June 28, 1930.)

Despite the increasing numbers to whom the ideas underlying psycho-analysis have become familiar, the recent restatement of "Freud" by Freud is relatively unknown. His disciples have carried on a campaign of exposition of the clinical phases and their bearing on life problems and the interpretation and organization of human motives. The divergent views of Jung and Adler, of Adler notably, continued the same emphasis with more liberal interpretations. Yet through it all the starred feature is the origin of the neurotic trends and the technic for their control.

Dr. Freud shows the characteristic tendency, as thinkers approach three-score-and-ten, to lose interest in the collection of data and focus upon the fundamentals which now, as of old, implies a philosophy. This is equally true of William James and Wilhelm Wundt, two other master minds. Freud's interest in clinical psycho-analysis has given way to its theoretic formulation, which in truth is not "psycho-analysis" at all; Freud calls it "metapsychology", which supplies in the apt title of Dr. Healy's notable book "the structure and meaning of psycho-analysis".

A correctly perspective view of the Freudian psychology is not likely to arise in the clinical camp of Freudians. They are too closely absorbed in the intricate psycho-analyzing of "cases," whose complexity they tend to exaggerate, and whose diagnosis they coerce into conformity with accepted doctrines. There is in all a marked cultist streak which is not conducive to reflective clarity or objective sanity.

The contribution of Dr. Healy, Dr. Bronner, and Miss Bowers may be accepted as a long anticipated recognition of the development of Freud's views as a theory of psychic motivation. Dr. Healy is not a psycho-analytic practitioner; he holds no brief for any school or cult. He utilizes the psycho-analytic approach in the handling of personality and behavior problems of a far more varied and directive character than appear in a neurologic clientèle seeking relief from oppressive

conflicts. He is a broader type of clinician; and it is fortunate that he has included among his interests that of setting the Freudian house in order.

While I expected such a book to appear in due course, it was my further anticipation that it would be devoted to the clinical phase of psycho-analysis. This is still an urgent desideratum and would form volume 1 of the magnum opus of which Dr. Healy and his associates have given us volume 2. The method adopted in this book is well adapted to the purpose in hand. It consists of a large-type text on the left hand pages, stating Freud's own formulations, with a commentary on the right-hand pages in smaller type, setting forth the variant views of followers and dissenters—a psycho-analytic Talmud. It requires a close knowledge of the subject to follow this exposition, a far more sustained interest than even the well versed student of psychology is likely to command. To the serious student of the subject it is an indispensable guide.

So much for the right hand text indicating the purpose and temper of the volume; and now for my left hand comment which, I fear, will in some circles be regarded as a left handed compliment. For the fundamental question that readers of reviews of books-to-be-read will ask, relates not quite to the structure or the meaning, but to the significance and value, and the ever persistent truth of it all.

Freud is weak, whether by temperament or training in the architectural sense; he erected his edifice as a series of facades and additions, with a ground-plan supplied as he built. Now, retrospectively, he makes good his deficit, yet never with the skill of Dr. Healy's penetrating pragmatic gift. The "cardinal formulations" are libido, cathexis, polarities, ambivalence, the unconscious, preconscious, and conscious, the "id", the ego, and the super-ego, the fundamental principles; pleasure and reality, Nirvana and compulsion, the Eros or life instinct, the death or destructive instinct. All of these have their developmental stages; a life is a genesis and a growth. They have their constitutional patterns strongly influenced by early experience. They disclose mechanisms, here better called dynamisms; and they end in character and personality, and there find their consummation and justification. Therapy is but an application and appears in the concluding chapter alone, however closely theory follows the clues of clinical findings.

This bare enumeration and its unintelligibility until elucidated, make it clear that the Freudian metapsychology is a new science, or shall we say speculation? It requires a new



vocabulary, a new approach, a new set of concepts. This story of the life of the mind is completely different from that of the standard psychologic versions of whatever origin that occupy academically and practically the great body of contemporary psychologists. If Freud holds the clue, they are pursuing false trails.

Has Freud made good? is the question. For what all this means for the understanding or management of a human life can but be hinted at in a review. If lives and personalities are but Freudian exhibits, then for the great majority life is lived with a minimum of understanding. It means that we are fearfully and wonderfully sexualized, not merely the lower centers of our protozoic past, now surviving as the "id", but equally the higher cerebral areas where ego rules and the super-ego soars, starting, like an airplane, with wheels on earth, but winging its way to the altitudes of human aspiration. We are victims all of the Oedipus fate and the emasculating dread called the castration complex. Our urges hover between life and death; we are victims of birth traumas and sex shocks. Our genital origin imposes a genital consciousness that never leaves us, and all we can do to live the life industrial, social, or intellectual is to convert and sublimate and transfer and symbolize and project and rationalize and idealize the original and persistent libido. Sex thou art, to sex returnest, was first (and last) spoken of the soul.

Is this really the truth of life? Is there no alternative except that of being glandular marionettes or Freudian robots of most fearful and wonderful construction? Must we ever appease our "id", consult our sub- and pre-conscious, make terms with ego and super-ego, before we can hope to understand ourselves or meet our fellow men? Is a normal man really made in the image of a Freudian neurosis? Will the momentous decision of the future be Freud or anti-Freud?

When we are told that the fear of small flying or crawling insects derives from the fear of the father who also makes a sudden appearance and excites the idea of getting rid of him; that smoking derives from a fixation on the nipple, and eating sweets from the mother's milk; that "later interests in painting, sculpture, cooking, metal molding, and carpentry are believed to be traceable to coprophilic pleasure in smearing and molding"; that characters divide according to anal and oral persistences, we seem to be justified in consigning the entire system that sponsors such conclusions to the nearest wastepipe, and then ask wherein "psyching" is more scientific

than other pretentious and marketable systems of reading character.

For there is the crux of the Freudian controversy.

Viewed in one aspect it seems to offer a penetrating illumination into the motives of life; viewed in another, it becomes a grotesque and degrading caricature. What is wrong: the structure or the details, the architecture or the plans and specifications? Important as it is to see the movement through, will the verdict of science declare it all ingenious futility and error, or a revelation of an unpleasant but wholesome truth? The reflection can hardly be avoided: if this is Freud, is Freud worth it?

Dr. Healy has furnished the protocol for a fair trial, and has done so in terms of Freud's maturest convictions. Among the recent contributions of Freud is a temperate but definite essay, "The Future of an Illusion", describing the fate of religion as it emerges from the psycho-analytic mill. Will some future critic consider Freudianism under the same title?

## Medical Ethics

### LOWERING OF THE STANDARD OF ETHICS

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, New Jersey

"We have lived from the time when public advertising of doctors was considered an ethical sin; and into the time when the most flagrant advertising of very prominent doctors in the lay press has been considered a remarkably virtuous performance."—Parker Symes.

I quote the above rather ironic words of a celebrated surgeon, the son of a most celebrated father, which were recently received in a personal communication, and I give the passage with the kind permission of the author.

Now, allowing for all altered conditions of this changing world, is the profession advancing or retreating?

The standard of so many things is undergoing transition. Doctors are not the only ones on whom the spot-light can be thrown.

Many of the practices of the present day, when viewed by the light of years ago, might not only bring ostracism to the perpetrators thereof, but could even land these individuals behind bars. (But, alas, the bars of those days were different from the bars of today!)

Even the Church is having the spot-light of criticism thrown in its direction. *And this is not entirely the fault of the laity!*

Business by its very nature and requirements is always changing its standards. An optimist naturally thinks things are always like Coué's little rhyme. Unfortunately, the other persuasions are vocal.

If the writer should begin to write on the ethics of sex relationship, he might get himself in deep waters, but here there are also many shallows—*also many rocks!*

It is even a debatable question if the *lowering* of the present strict ethical standard of National Prohibition would not *elevate* the righteous cause of Temperance (spelled, with intent, with a big T).

After all, "to err is human"! A straight thinker is, generally speaking, also a "straight shooter".

What is the matter with the Golden Rule?

## Esthetics

### MUSIC IN RELATION TO ART AND LIFE

#### PADEREWSKI'S PESSIMISM

(From the Literary Digest, Nov. 15, 1930.)

Paderewski sat on the edge of his chair as if playing the piano.

The great shock of auburn hair, made famous in Burne-Jones' drawing, is now thin and silvered.

"His high but sloping forehead is his most characteristic feature, and, dome-like, it dominates the remainder of his head, and in comparison with the lower part of his face seems small."

"There is nothing of the far-away musician about him."

These bits of personal character, observed by S. J. Woolf, during his interview with Paderewski for the New York World, compare with the thoughtfulness and vigor of the musician's talk about the situation where our mechanistic age has placed all the arts, not simply music.

Finding music is only a little behind the trend followed by pictorial art, he asserts that "art has been on an orgy". Thus:

Some few years ago it went wild for color.

Line was forgotten in mad desire for vivid hues.

Today music is still in the state that painting was in some years back.

Color is the god before which all modern composers are worshipping, but they forget there are other gods than that. They have blinded their eyes, if I may so express it, to the beauty of the simple lines of the classicist, and endeavor by effects of color to attain beauty without line.

Light and shadow and the glow of color are

wonderful, but they must have outlines to bound them, otherwise they are formless masses. And then, too, while I have been speaking of painting and music in similar terms, after all color is not music.

Next he was asked what he thought was back of these tendencies in the arts, and Paderewski, who was once Premier of Poland, showed he has reverted to the artist, when he said:

We are living in a strange age.

Economics and inventions and discoveries have held the public attention for some years.

I do not underestimate the value of these things. They may make for physical comforts, but with them they bring attendant evils that kill creative genius in art. For genius is a tender plant which will not thrive in all soils or surroundings, and the quiet and peace that are essential to it have been driven out by the mad haste and constant desire for change and challenge that mark this era.

Individuality and originality are being killed by the increasing necessity, I might almost call it, for collectivism.

The day of the lonely craftsman has passed. One man rarely produces any finished product today. It is the result of many hands, and while better automobiles may perhaps be produced in this way, surely better poems or paintings or sonatas can not. And it is this spirit which is pervading everything.

For great art, though it is the creation of one man, is the product and the result of the time in which he lives.

Each could not have written his works in a sky-scraper any more than Michelangelo could have decorated one of the modern temples of industry.

Men are not happy today, he thinks, and, throughout the world, in politics as well as in all the arts, is "a constant desire to get away from existing conditions". He continues:

In art there is a striving for originality. Men are endeavoring to create something new.

Nothing new was ever created consciously. True originality has its foundations in the soul, not in the mind, and when there is an effort to create something different, it is usually a failure. Beethoven or Schumann or Chopin did not try to be original. They were original.

However, this craving for originality, this desire to get away from old forms, this pulling down of the old-time gods, is typical of this period of the world's history.

Men feel the same dissatisfaction in regard to politics.

Throughout the world there is an undercurrent of unrest.

For years the so-called parliamentary system in government had been looked upon as a panacea for all ills. It was felt that when the man in the street was represented in a legislative body, then that man had something to do with the making of the laws and management of his country.

But ideas in regard to this are changing.

People are beginning to feel that this system is not altogether what it promised. Indeed, it has been my experience that in most bodies of this kind a tremendous amount of time is wasted in useless and futile talk.



Hours are used up in listening to speeches of no import or value. In times of economic distress long discussions in parliaments only irritate.

A hungry man's appetite is not appeased by words. What he wants is food. And when he sees that the words do not give him food, he becomes dissatisfied with that system of representation which does not provide him with necessities, let alone comforts.

It is this spirit of dissatisfaction with things as they are that has caused both the artistic and political restlessness throughout the world today.

## In Lighter Vein

### Fact-Finding Stuff

A committee of 5 usually consists of the man who does the work, 3 others to pat him on the back, and 1 to bring in a minority report.—Royal Arcanum Bulletin.

### Banking On Wifey's Nerves

Jinks—"My wife thought she heard burglars last night, and I went straight downstairs to investigate."

Binks—"Gosh, how could you be so positive she was mistaken?"—Chicago News.

### On the Sunny Side of the Grass

"My brother is working with 5000 men under him."

"Where?"

"Mowing lawns in a cemetery."—Log.

Concern advertises the perfect bridge lamp. Must be light enough to see by and too heavy to throw.—Dallas News.

Scientists have achieved some wonderful results, and maybe in time one of them will succeed in producing a cigarette the ashes of which will match the color of the rug.—Louisville Times.

### Answered at Last

She (in poetic mood)—"What are the wild waves saying?"

He—"Sounds like 'splash.'"—Panther.

It now appears that the coffee situation is the chief cause for the revolution in Brazil. We've tasted coffee like that, too.—Judge.

An insane-hospital up in New Jersey has installed a miniature golf course for use of its patients. Try to laugh that off.—Jackson News.

### As Good as a Lip-stick

Martha, aged 4½, had been ill. Protruding her tongue, she asked: "Mother, how does my tongue look?"

"Oh, it's all coated white."

"You buy me a red lollypop and I'll fix it."

### In Dire Need of Strength

The following message, pencilled on a scrap of wrapping paper, was recently delivered to a physician, member of this society:

"Pleas give this boy strong medcin as I didn't adminstrate reglar for 2 months so send something strong."

## Lighthouse Observations

### THE PUBLIC RELATIONS COMMITTEE

It has been our custom to carry in this department a résumé of recent scientific developments in regard to some particular disease problem but this month we are devoting the space to a problem of equally great concern to the profession: i.e., to the best means of dealing with some problems that affect the health of the medical profession itself. At the moment there is so much discussion of economic problems, general and specific, that we cannot find sufficient space for publication of all that seems pertinent to our needs or relevant to our daily occupations. In consequence, we shall present for your information, through use of this column, an abstract of views expressed at the recent annual Conference of State Society Secretaries and Editors, held under the auspices of the American Medical Association, by Dr. William H. Ross, President of the Medical Society of New York State. The meeting in Chicago this year, attended by the President of the Medical Society of New Jersey, Dr. George N. J. Sommer, as well as by your Secretary and Editor, Drs. Morrison and Reik, was an exceptionally interesting event; as you may learn from a special letter in this issue of the Journal, wherein President Sommer records his impressions.

At each of these annual meetings, the Secretaries of all the State Medical Societies—and such officers are in closer touch with and make perhaps the best possible representatives of generalized state professional opinion—confer upon one or more vitally important organization problems. On the recent occasion, Dr. Ross presented an elaborate paper upon the subject of "The Public Relations Committee" as developed in the medical society of his state during the past 3 years. We may be permitted to say at this point that the functions of that committee are embraced, in New Jersey, in the program of our Welfare Committee; in other words, we have the same thing under a different name. In New Jersey, too, during the last 2 years, practically every county medical society has provided for a local welfare, or public relations, committee of its own, to function locally and to coöperate with the similar state society committee. So, we have, already set up, the machinery for consideration of and action upon such problems as Dr. Ross was discussing.

Dr. Ross' paper will in due time be published in full in the American Medical Association Bulletin, so we shall attempt here to present only a condensed report upon the more important features of his address, as follows:

There is an economic disturbance in the medical profession greater even than the general economic disturbance in industry. The medical profession has for some time blamed health organizations, and even departments of government, for public health activities, on the ground that they have interfered with the private practice of medicine. The profession has seemed to believe that interference with private practice is solely due to activities of these agencies, and has seemed to forget that medical research and discoveries, together with changed social conditions and increase in public knowledge, are the real causes of such activities. Times are changing. The general public has become interested, and industry and civic organizations are at work, in response to public demand and supported by public opinion, trying to advance health service with a view to



saving as much as possible of the \$100,000,000 annual wastage through preventable illness. There is an oncoming tide of public sentiment for the advancement of public health, with the object of limiting illness and lengthening life, and providing adequate medical care in sickness. No one could sit through the recent 4-day meeting of the American Public Health Association, with its 10 sections going on concurrently, its 168 speakers listed, and the largest number of practicing physicians ever in attendance, without realizing that times are indeed changing. The effort of organized medicine to meet its own professional problems has up to the present time been along the line of creating committees and bureaus for study of economic problems and in argument against the health efforts of various agencies and the paternalistic tendencies of government. Organized medicine has not undertaken an impartial appraisal of its own organization to see whether its own public medical relationships are such as to make it most efficient in the distribution of preventive measures and provision for medical care.

Organized medicine must realize that the day of isolation is over and that it must go through the throes of adjustment to new conditions and prepare to go along with the irresistible force of public opinion. Our Public Relations Committee in New York has during the past 2 years arrived at a more comprehensive conception of the obligations resting upon the medical profession—to render satisfactory public service as well as to attend to its own private business. We recognize that scientific medicine has developed much faster and traveled further than has the application of scientific discoveries to the limiting of unnecessary illness and the provision for adequate care of all classes of sick people. This committee believes that it is proper to secure aid from other sources, when funds are not available from general taxation, for administrative organization of mass or semi-mass health service, and for health education; that the profession is responsible for guidance of all efforts to advance preventive medicine; and that the profession should be the major factor in proposals for solution of the great problem of adequate medical care.

Organized medicine will not overcome its difficulties until it has made a proper self-appraisal and determined whether it is meeting all of its obligations to render public service. If it does not meet these obligations, some other agency will; and possibly in a manner that will be unsatisfactory to the profession. The organized profession of Great Britain has just made a proposal for extension of the National Health Insurance Act; a proposal that might better have been made 20 years ago, although it is to the credit of the British Medical Association that it is now properly meeting the situation. There is a lesson in this for the medical profession of America. Will we heed it?

Medicine has come to have a public character; knowledge of what can be had in the way of health service is rapidly expanding; the broadcasting of unsolved health and medical problems is increasing. The social trends of the time irresistibly insist upon better health service; as is reflected in public welfare laws, old age pensions, etc. The profession is confronted by a new state of affairs.

Heretofore, medicine has spent its effort largely in studying the effects of public health service upon its own material rewards and has given a minimum of consideration to the causes underlying social changes. We might well consider

some of these social changes: the increased purchasing power of the public, due to better wages and shorter hours of labor; increased education; tripling of the per capita wealth during the past 25 years; the increase in man productivity by 40% within 12 years; the present mechanized state of industry, resulting in unemployment because of the lessened need for men.

Emerson tells us that society is always taken by surprise at any new example of common sense. Let us see if we can apply common sense to our problems. There are 2 methods of procedure open to the medical profession. One is to fight public opinion and retreat as slowly as we can; you can find examples of that expressed quite frequently in medical meetings. The other is to accept the practical philosophy of self-appraisal, and if the result of such self-examination warrants it, to make proposals for meeting public health needs by the prevention of illness and the provision for proper care of the people when sickness comes. The second method may be successfully followed if our relationships be changed so as to cooperate with other agencies under the expert guidance of the medical profession. Are we equal to this responsibility?

The Public Relations Committee of the New York State Society, as a preliminary step, undertook to have organized in every county society a Public Relations Committee. Then, it undertook to have each county committee make a survey of the health activities of the county and the relation of the local profession to them. If the principle of conference between the various health agencies was not in use in reaching conclusions, and if there was not a cooperative relationship, then the State Committee undertook to bring about such a conference with the object of cooperation on the fundamental basis that the medical profession was the only body that could give expert guidance to methods of distribution of health services and that it was willing to be consulted.

Notwithstanding the almost complete transformation of medicine within the recollection of many of us, because of laboratory aids and the use of instruments of precision in diagnosis and treatment, there may come another revolution in medical practice, as it has come in the past, as the result of great social needs, and who knows that it is not beginning. We may be nearer than we know to such things as unlimited old age pensions, provision for adequate medical care by the state, and the inclusion of sickness benefit in Workmen's Compensation and compulsory health insurance laws as in other countries. It should make us think.

The work that the Public Relations Committee undertakes to do is to establish by conference a conclusion as to plan and then a cooperative relationship between official and unofficial health agencies and the medical profession. It undertakes to arouse medical interest in present day social trends and the need of providing plans for the distribution of preventive service, i. e. the establishment of a county health department with a full-time and trained personnel. Another is the support of the work of Parent-Teacher Associations and the value of the family physician in preschool work. Another is the proper relation of the medical profession to the movement on the part of the state to aid in the establishment of county hospitals so that the entire profession may have the educational opportunity arising from service in a hospital and in formulating rules and regulations to control standards of practice.

The Public Relations Committee undertakes to

adjust differences of opinion between the medical profession and the health activities of other organizations by use of the principle of conference while the proposals are in the formative stage. It undertakes to visualize the medical future; to see as far as possible what is ahead in medicine and plan such relationships as are necessary for medical leadership. The medical profession can never cure the ills that it complains of by fighting the present social trends. It can no longer afford, in more senses than one, to hold a hostile attitude toward any health agency supported by public opinion. It will suffer if it does not have a receptive rather than a hostile attitude.

I have been a part of a movement in my county medical society that has resulted in as desirable a relationship of the profession and health agencies as one could conceive of—a movement that has given the profession leadership with the support of lay organizations. A county medical society that does not modernize its relationship into harmony with new conditions is not meeting its professional obligations nor laying a foundation to prevent economic disturbance of the private practice of medicine.

No amount of resistance to the present social trends will make any final difference. Continuation of present methods to cure our ills will amount to nothing. To consider medicine under seige, and the tendencies of government as paternalistic, will avail nothing; but self-appraisal of ourselves and proposals from the organized profession regarding medical problems will succeed and will put the profession of medicine in the position that it should be in and the position that public opinion expects it to occupy.

## Public Relations

### SURGEONS REDUCE FEES

(From N. Y. Times, Nov. 18, 1930.)

A plan to reduce the cost of medical attention for the so-called white-collar workers, under which 2 hospitals will reduce their rates and prominent physicians and surgeons will give their services at decreased fees, was announced last night at a dinner in the Hotel Commodore.

The hospitals are the Park West at 170 West Seventy-sixth Street and the Park East at Park Avenue and Eighty-third Street, both built originally by the same stock company to care for wealthy patients. The plan was described to 200 members of the staff of the 2 institutions by Thomas F. Dawkins, executive manager of both hospitals.

If the reduced rate program proves successful, both institutions will be turned over to the doctors and nurses of their staffs for operation as co-operative enterprises, according to Mr. Dawkins. Although the plan was not announced as in any way connected with the recent statements of Health Commissioner Wynne, that doctors are faced with the alternatives of lower fees or State Medicine, it agrees with Dr. Wynne in its emphasis on the need for placing hospital care within reach of persons with moderate incomes.

The Park West Hospital, opened in 1926, has 75 beds and represents an investment of \$750,000. The Park East Hospital has 130 beds. It was opened in September 1928, at a cost of approximately \$1,000,000.

Since these institutions were designed at first only to serve wealthy patients, the cost for a

room was fixed at from \$13 to \$40 a day, Mr. Dawkins said. Under the new plan it will be possible to obtain a room for \$6.50 a day. For those who desire better accommodations there will be a maximum of \$30 a day.

The practitioners who have already agreed to reduce their fees include some of the best known medical men in the city. The practice of basing fees for operations on the patient's apparent ability to pay would be curtailed to a great extent, Mr. Dawkins indicated.

Medical men connected with these institutions include Dr. Thomas Darlington, former health commissioner, who is on the advisory board, and Dr. Howard M. Hayes, president of the board of both institutions.

### INFANT MORTALITY LOWEST IN HISTORY

(Newark Evening News, Oct. 24, 1930.)

New Jersey's infant mortality rate for 1929 is the lowest ever recorded for this state, according to statistics of the bureau of census and division of vital statistics of the United States Department of Commerce. The rate was 60 deaths under 1 year of age per 1000 births. New Jersey is 1 of 11 states whose rates are lower than at any time since their admission to the registration area.

The infant mortality rate throughout the registered area, which comprises 46 states and the District of Columbia, is 68 per 1000, the second lowest since the establishment of the birth registration area in 1915. For the sixth consecutive year, Oregon leads the states with the lowest rate, 48.

While the infant mortality rate throughout the country was lower than usual last year, statistics show that the birth rate for 1929 was 18.9, the lowest for any year since establishment of the birth registration area. Oregon had the lowest rate, 14.1, of any state. New Jersey's rate was 17.2.

### PENDING LEGISLATION ON ABELL COMMISSION REPORT

In the Welfare Committee Minutes (page 65) you will find a review of the 3 Bills now under consideration in the Senate of the General Assembly, and will note the decision to oppose passage of those Acts. It seemed necessary to oppose S. 262 and S. 304 *in toto* because of their glaring defects. Inasmuch as the medical profession is not opposed to a proper budget system honestly constructed and applied alike to all governmental departments and boards, without discrimination, it was suggested that these Bills could be made acceptable by amendment, and the changes proposed were designed: to clarify the question of authority; to guarantee that the boards would be allowed appropriations as large at least as their own receipts—to carry on law enforcement; to place the new "bureau" under the Board of Regents instead of a state officer whose appointment and tenure of office are subject to political control; and, to "cover in" the lawyers and realtors along with other examining and licensing boards.

These points are all excellently well expressed and approved by an editorial in the Camden Courier-Post of December 16, as follows:

### Bill 304 Carries the Spirit of Reform but not the Substance!

New Jersey has 14 separate professional boards. Each has its own secretary, maintains its own inspecting staff, operates its own office and collects and disburses its own funds.



Bill 304, sponsored by the Abell Commission, would consolidate 12 of these boards under a Bureau of Professional Registration. Hearing on that measure takes place today, and vigorous protests are being lodged against it, especially by the medical profession.

The principle embodied in this bill is one for which this newspaper has long stood—economy in state administration through consolidation of activities and centralized financing. No private business permits each of its departments to handle its own financial affairs and, to all effects, operate as an independent concern.

There are, however, serious defects in Bill 304.

The medical profession, not without reason, asks why the legal profession should be exempted from the measure along with the State Real Estate Board? *If it is good business to consolidate 12 of the 14 State boards should it not be even better business to consolidate the whole 14?*

Lawyers, however, drew up the measure. And by exempting themselves they expressed exactly the same opposition to the bill that the physicians and other protesters are to make at today's hearing. That is, they don't object to the principle of this bill—only *they don't want to be subject to it.*

\* \* \* \* \*

More serious than that seeming discrimination, however, is the fact that Bill 304 will tend to limit the *professional authority* of the various boards, although they will still be continued in existence.

There is a justification for the fears of physicians that the proposal to place all the boards under the authority of the Commissioner of Education—a political appointee—will tend to bring politics into the various boards and lower their standards.

*Especially is this important where the boards concerned are charged with safeguarding the public health. Most important of all, in the medical profession!*

New Jersey has high standards which should be maintained free from political influence. Bill 304 does not guarantee that, even though the Abell report clearly states "the regulatory work of these boards would in no manner be interfered with."

Moreover, the purposes of the scheme as outlined in the Abell report do not seem fully realized in the proposed legislation. In the report it is stated:

*"We recommend that a Bureau of Professional Registration be created in the Department of Education which will consolidate these twelve examining and licensing boards into one unit, with one Secretary instead of the dozen now drawing pay. Great economies in rents would likewise be effected."*

But the bill itself reads:

*"The Commissioner of Education shall . . . appoint a secretary of said bureau and such clerical, technical and other assistants as may be necessary, fix their compensation and prescribe their duties . . ."*

In short, while there will be one secretary, there will be a lot of other jobs, under other names.

Insofar as Bill 304 covers the consolidation of the financial functions of these professional boards it has our hearty approval.

But we do believe the measure is weak in that it is not emphatic enough in assuring the public that their regulatory functions will not be molested; and that it is far too vague as to how the promised economies in operation are to be effected.

In brief the measure should be redrafted along these 3 lines:

*To consolidate the boards in matters of finance;  
To preserve their standards of qualification,  
notably in the professions which concern the public health;*

*And lastly, to make definite, in the bill itself,  
a guarantee that there will be real economy and  
not sham economy!*

## THE WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION

Reported by William G. Schauffler, M.D.,

Princeton, N. J.

The Conference on Child Health and Protection called by President Hoover met in Washington, D. C., on November 19, 1930, and continued through November 22. The sessions were held in the group of buildings centering around the Red Cross Building and the Hall of the Daughters of the American Revolution. Conference headquarters was at the Interior Department Building, and the general meetings were held in Constitution Hall, which holds about 5000 people, and which was filled at the opening session on Wednesday evening, when President Hoover made the opening address after Secretary Ray Lyman Wilbur, M. D., Chairman of the Conference, had welcomed the delegates.

Over 3000 delegates attended this meeting, coming from more than 20 states. They represented the tremendous interest shown in all parts of our country for, child welfare, and were a remarkably fine body of men and women. The work of the conference was divided into 4 Sections as follows:

### Section 1. Medical Service, subdivided into

- (a) Growth and Development.
- (b) Prenatal and Maternal Care.
- (c) Medical Care for Children.

### Section 2. Public Health Service and Administration.

- (a) Public Health Organization.
- (b) Communicable Disease Control.
- (c) Milk Production and Control.

### Section 3. Education and Training.

- (a) The Family and Parent Education.
- (b) The Infant and Pre-School Child.
- (c) The School Child.
- (d) Vocational Guidance and Child Labor.
- (e) Recreation and Physical Education.
- (f) Special Classes.
- (g) Growth Outside of Home and School.

### Section 4. The Handicapped.

- (a) State and Local Organizations for the Handicapped.
- (b) Physically and Mentally Handicapped.
- (c) Socially Handicapped, Dependency and Neglect.
- (d) Socially Handicapped, Delinquency.

In preparation for this conference more than 150 committees and subcommittees had been gathering material and collating it for consideration during the past year, and the facts were stated in a most intelligent and comprehensible manner.

Breakfast, luncheon and dinner groups were held during the 3 days of the meetings, at which the subjects could be talked over more informally than in large group meetings.

On Saturday morning the 4 section chairmen presented consolidated reports, and the conference was concluded with the "Consideration of Reports



by the Conference", presented by the Chairman-Secretary Hon. Ray Lyman Wilbur, M. D.

These conclusions, which will form the basis of work in all parts of the country, were as follows: Every American child has the right to the following services in its development and protection.

*Every child should be understood.*

(1) Every prospective mother should have suitable information, medical supervision during the prenatal period, competent care at confinement. Every mother should have postnatal medical supervision for herself and child.

(2) Every child should receive periodic health examinations before and during the school period, including adolescence, by the family physician, or the school or other public physician, and such examination by specialists and such hospital care as its special needs may require.

(3) Every child should have regular dental examination and care.

(4) Every child should have instruction in the school in health and in safety from accidents, and every teacher should be trained in health programs.

(5) Every child should be protected from communicable diseases to which he might be exposed at home, in school or at play, and protected from impure milk and food.

(6) Every child should have proper sleeping rooms, diet, hours of sleep and play, and parents should receive expert information as to the needs of children of various ages as to these questions.

(7) Every child should attend a school which has proper seating, lighting, ventilation and sanitation. For younger children, kindergartens and nursery schools should be provided to supplement home care.

(8) The school should be so organized as to discover and develop the special abilities of each child, and should assist in vocational guidance; for children, like men, succeed by the use of their strongest qualities and special interest.

(9) Every child should have some form of religious, moral and character training.

(10) Every child has a right to a place to play, with adequate facilities therefor.

(11) With the expanding domain of the community's responsibilities for children, there should be proper provision for and supervision of recreation and entertainment.

(12) Every child should be protected against labor that stunts growth, either physical or mental, that limits education, that deprives children of the right of comradeship, of joy and play.

(13) Every child who is blind, deaf, crippled or otherwise physically handicapped should be given expert study and corrective treatment where there is a possibility of relief, and appropriate development or training. Children with subnormal or abnormal mental conditions should receive adequate study, protection, training and care.

(14) Every waif and orphan in need must be supported.

(15) Every child is entitled to the feeling that he has a home. The extension of services in the community should supplement and not supplant parents.

(16) Children who habitually fail to meet normal standards of human behavior should be provided special care under guidance of the school, the community health or welfare center, or other agency for continued supervision, or, if necessary, control.

(17) Where the child does not have these services, due to inadequate income of the family, then

such services must be provided for him by the community.

(18) The rural child should have as satisfactory schooling, health protection and welfare facilities as the city child.

(19) In order that these minimum protections of the health and welfare of children may be everywhere available, there should be a district, county or community organization for health, education and welfare, with full-time officials coördinating with a state-wide program which will be responsive to a nation-wide service of general information, statistics and scientific research. This should include:

(a) Trained, full-time public health officials with public health nurses, sanitary inspection and laboratory workers.

(b) Available hospital beds.

(c) Full-time public welfare services for the relief and aid of children in special need from poverty or misfortune, for the protection of children from abuse, neglect, exploitation or moral hazard.

(d) The development of voluntary organizations for children, for purposes of instruction, health and recreation through private effort and benefaction. When possible existing agencies should be co-ordinated, to avoid overlapping. It is the purpose of this Conference to establish the standards by which the efficiency of such services may be tested in the community, and to develop the creation of such services. These standards are defined in many particulars in the reports of the committees of the conference. The Conference recommends that the continuing committee, to be appointed by the President from the conference, shall study points upon which agreement has not been reached, shall develop further standards, shall encourage the establishment of services for children, and report to the members of the Congress through the President.

New Jersey was well represented at the Conference by members of the State Medical Society and laymen and women. Commissioner William J. Ellis, of the Department of Institutions and Agencies, was prominent in the work of Section 4.

## State Health Department

### STATE HEALTH LAWS

(A communication from D. C. Bowen, Director New Jersey State Department of Health.)

Wide commendation is meeting the "Physicians' Handbook", prepared and distributed by the State Department of Health. Simplicity and conciseness of the new booklet of vest-pocket size for handy reference are the characterizations of one of its endorers. Copies are available to physicians of the state without cost and may be obtained by communicating with the department, at the State House, Trenton.

Do you find it hard to keep in mind just what matters you should report to boards of health and when and how these reports should be made? It is not surprising if you do. Regulations on the subject are long and appear in several different laws which are not easy to read nor to remember.

The Physicians' Handbook lists under separate headings subjects on which you are expected to report, in accordance with various laws and regulations, state-wide in effect. The booklet is arranged in a manner convenient for ready refer-

ence. Legal terms are avoided. It is concise, and I believe it will be helpful to you. Will you not look over the booklet now and note what it contains. It will fit your pocket.

Acknowledgements have been most gratifying to the department for the work involved. Dr. James J. McGuire, of Trenton, Secretary of the State Board of Medical Examiners, plans to give each successful candidate qualifying in the board's examinations a copy of the booklet, which the State Department of Health will supply.

The reportable communicable diseases, dog bites of persons, epilepsy and mental deficiency, and drug addicts under treatment are dealt with under a uniform arrangement of sub-heads which include: (1) what diseases to report, (2) what facts to report, (3) to whom to report, and (4) when and how to report.

Reporting of diseases which occur on dairy premises, and of venereal diseases, is discussed under appropriate headings.

Physicians' duties with respect to recording births and deaths are explained in a concise way.

The busy physician will find in the 12 pages of this booklet information he frequently needs in a form convenient for ready reference.

In a foreword to the booklet, the department said:

Physicians are usually the first who see cases of communicable diseases in a community and are able to give authoritative warning of their presence.

Local health departments have been empowered to enforce measures to prevent the spread of these diseases, but no health department, however well organized, can plan nor apply effective measures to prevent their spread without a knowledge of when and where cases occur.

Responsibility has also been placed upon health departments to collect records of births and deaths, and to preserve these records, so important to the people of the state. Again it is the physician who has knowledge of facts and conditions essential to such records.

For the public welfare, therefore, state laws and regulations have placed upon physicians the duty of reporting cases of communicable diseases and certain other ailments, and of filing or supplying facts for certificates of births and deaths. A digest of these state-wide, legal requirements, for the reference of physicians, is given in this booklet.

## Communications

### IMPRESSIONS OF THE ANNUAL CONFERENCE OF SECRETARIES OF CONSTITUENT STATE MEDICAL ASSOCIATIONS, 1930

Dr. George N. J. Sommer, M.D.,  
Trenton, N. J.

This meeting was held at the American Medical Association Headquarters in Chicago, November 14-15, 1930. On the invitation of Drs. Morrison and Reik, I attended this meeting and was cordially received by the President, Dr. William Gerry Morgan, Secretary Olin West, and various members of the Board of Trustees, one of whom, Dr. J. H. J. Upham, of Ohio, happened to be an old class-mate.

The papers presented were quite notable and quite to the point, dealing largely with present

day problems of the profession in its relations with the general public.

The paper of Dr. R. L. Parker, of Des Moines, on "Service for the Indigent Through Contract with the County Medical Society", described a plan which has been put into practice by 11 of the county societies in Iowa and apparently is working out satisfactorily. A close study of this plan would solve this problem to the satisfaction of physicians and public in rural counties at least. (See editorial, this issue.)

Dr. F. C. Warnshuis, of Grand Rapids, Michigan, read a paper on "The Relations of State Boards of Medical Examiners to State Medical Associations"; which seemed to be similar to what we have in New Jersey, but which arrangement for us seems to be in grave danger from the Abell Report recommendations.

Dr. W. C. Rappelye spoke on the general subject of "Health Insurance" and gave some facts relating to the systems in vogue in England, Germany and other countries of Europe. No solution for our country was advanced but the data gathered by him will need to be considered by us to solve our problem in this regard. "Co-operation Between Medical, Public Health and Educational Organizations" was discussed by Dr. E. A. Myerding, of St. Paul, in a lengthy description of the method now in use in Minnesota. It is an expensive, thorough program financed by the State Medical Society and Social Service Organizations, under one head, and is working well; an example of a good way to do a necessary work under control, as it should be, of medical men.

Dr. F. C. Hammond, of Philadelphia, Editor of the official organ of the Pennsylvania State Medical Society, presented his ideas on "What a State Medical Society Journal Should Mean to the Society Membership". This paper will bear intensive study by medical men of any state. Our Journal measures up to all of the standards he established and is serving our membership exceptionally well.

The last, but not least, was a paper by Dr. William H. Ross, President of the State Society of New York, on "The Public Relations Committee". This is the coming bulwark of the profession against the encroachments of State Medicine and the problem was discussed in scholarly manner by one who has given much of life and time to study of professional relations with the public. No doubt this paper will have a great influence on this perplexing problem and its solution.

After hearing all these papers one was struck with the grasp of the various authors on the great problems of the profession of our times, and no doubt the papers will be of use to us in New Jersey in solving our own problems.

I was personally much impressed with the remarkable executive talents of Drs. Olin West, Secretary, and Morris Fishbein, Editor, in their sane attitudes toward the problems which confront the medical profession.

### MENTAL HYGIENE

(A letter from Dr. F. E. Williams, Medical Director, National Committee for Mental Hygiene, New York City.)

The phenomenally rapid growth of interest in all aspects of extramural psychiatry in recent years has created several situations of considerable gravity, of which the shortage of adequately trained personnel is by far the most pressing.



The mounting interest of communities in child guidance and other types of mental hygiene clinics has already exhausted the never-sufficient supply of specially trained psychiatrists for this work, and unless physicians with the requisite training and aptitude can be secured in greater numbers, either the establishment of many new clinic projects will be delayed, or, worse, their functioning will be attempted by unprepared or poorly prepared staffs.

To assist in lessening some of this shortage of properly trained psychiatrists The National Committee for Mental Hygiene offers fellowships toward acquisition of the special preparation required. Details of these fellowships are contained in the enclosed announcement, a reproduction of which in the columns of an early issue of your periodical will be deeply appreciated in the interests of modern medical education.

#### Minimum Requirements for Applicants

These fellowships are designed to provide special training for physicians who have had previous hospital training in psychiatry but who wish to prepare themselves for extramural work in the fields of child guidance, delinquency, education, dependency, and industry.

Fellowships are open to physicians who are:

- (1) Under 35 years of age.
- (2) Graduates of Class A medical schools.
- (3) Who have had at least 1 year of training in a hospital for mental disease maintaining satisfactory standards of clinical work and instruction. A longer period of hospital training is desirable.

Applicants able to meet these requirements will not be required to take competitive written or oral examinations. Selections will be made on the basis of length and type of previous training in formal psychiatry; on general fitness for the work contemplated; and (in most cases) on the results of a personal interview.

#### General Details of Fellowships

(1) These fellowships cover a period of training approximately 1 year in length.

(2) During this training period, trainees usually are assigned for 3 to 4 months' periods at such places as the Boston Psychopathic Hospital; Judge Baker Foundation, Boston; Institute for Juvenile Research, Chicago and other places of a similar nature, as well as to various child guidance clinics located in Cleveland, Philadelphia and other cities. Assignments to these training centers are not definite, however, and assignment to any given place will depend upon the availability of instruction at such place, as well as the special needs of the individual trainee. Assignments are not made for more than 3 months in advance, and adherence for the year's training period to a fixed program in advance is impossible.

(3) These fellowships carry stipends at the rate of \$2000 to \$2500 for the 12 months' period.

(4) Applications need not be filed within stated periods but will be received at any time. In the case of successful applicants, arrangements will be made to begin work whenever mutually convenient to the applicant and to the director of the training center to which the applicant is first assigned.

Applications or inquiries for further informa-

tion should be sent to Dr. Frankwood E. Williams, Medical Director, National Committee for Mental Hygiene, 370 Seventh Avenue, New York, N. Y.

#### PRE-SCHOOL AND SCHOOL PHYSICAL EXAMINATIONS

Harold Edwin Wright, M.D.,  
Princeton, N. J.

(A letter to the Journal, under date of November 11, 1930)

In the issue of the Journal for October 1930, under School Health Department, was an article entitled, "Preliminaries to the School Doctors Examination".

It appears much like a harmless little article and hardly worth commenting upon but its practical worth, while of little value should be discussed. Some writers on questions relating to school matters always seem to think the teacher has plenty of spare time on her hands, and thoughtlessly suggest some new idea to consume some part of her day in helping to carry out some suggestion; very often a foolish one.

After about 20 years experience as a school medical inspector, connected with a school system of very high standing, I feel I am competent to express myself with some judgment of experience. Where can there be any improvement in the mental attitude of a child who receives a physical examination the first week of school or the third week? What can a teacher do to prepare a child to meet a school medical inspector, if the inspector does not understand how to meet and handle children? Also, how does a child's mental status improve a physical defect? If the examination consists of a psychologic laboratory test, then the mental preparation could be appreciated, but the examination of eyes, throat, ears, posture, heart, lungs, etc., needs no mental preparation; such organs have either a defect or no defect, which is readily ascertained. A child to be examined physically in school is in a very different class from a child who approaches a physician for some ailment. Delaying the examination for a few weeks is a small matter, very true, but what have you accomplished by such a delay?

Observation in the class room by the teacher, to ascertain any peculiar traits of a child, such as likes, dislikes, habits, etc., will be of value possibly to the teacher but not to the doctor. The efficient school inspector does not need assistance of the teacher to discover whether a child is undernourished. In comprehensive school systems the children are weighed each month by the nurse and records are kept, which enables the school physician to bring influence to bear at home. While the duties of the nurse are multiplying and her responsibilities are greater, yet she should always be at the disposal of the medical inspector to assist him both in conducting physical examinations and follow-up work on detected defects.

Just how much progress and thoroughness is made in other places, the writer does not know. However, we do feel that in Princeton every side of the question of school medical inspection is practiced. For many years we have been very particular concerning health of the teachers and a physical examination of each one is made annually. We are laying particular stress upon the pre-school examinations of children. These ex-

aminations are only conducted in the presence of the parent. They are by far the most important examinations made. They enable the child to enter school with all defects corrected, and the parent of the child is taught to appreciate the value of such corrections and how to care for a child that is not normally developed. In Princeton these examinations are conducted every spring and are becoming each year more popular. Place the child in school with 100% physical condition and the teacher will have much less trouble with the mental development. To do this, we do not need any foolish training of a child's mind to meet the doctor. Also, such examinations of pre-school ages conducted in the presence of the parent can be done with the clothing removed. We sincerely hope the removal of all clothing of each school child, as has been suggested, will never be practiced. It would create, and justly, a storm of criticism, and in the opinion of the writer would require possibly 2 examiners, a man and a woman. This is unnecessary expense to the taxpayer for questionable results. It is a procedure which is not required if pre-school age examinations are emphasized. It is very hard for the writer to understand why so great a weight is placed upon a foundation the strength of which has not been estimated. If we have knowledge of the child's physical condition when it commences its school career, we know what to expect and what can be done.

This view, certainly is a practical one; it is an inexpensive one; and it eliminates a great deal of the so-called gallery play or idealistic impracticabilities. The rural districts can afford thorough pre-school physical methods when they can see the results, but cannot afford the many useless methods advocated for the school child after it has entered upon its career. It seems strange that more common sense and not so much theory does not prevail.

Another point that must be borne in mind is the difference in methods used in the larger communities and those used in the rural districts. It is very possible for the larger towns, where enrollment is very large, to practice what is being done in New York; i.e. for the teachers in each grade to set aside 1 day for gross inspection of the pupils for enlarged tonsils, eye-readings, hearing tests, and detecting any unusual abnormality; I do not mention teeth because they should come under the dental department. This procedure may have its valuable side in places where thousands of pupils are to be examined, but it would not fulfill the law in New Jersey where it is specified that examinations must be made of each pupil, each year, by a medical inspector. Should there be a change in the present system, the writer sincerely hopes it will be the development of a system in regard to the pre-school medical attention. Also, if a child enters school pronounced free from defects, annual physical examinations would be superfluous. Examinations upon entrance to school and subsequent ones about the third and sixth years would cover the requirements.

While the duties of the school nurse are increasing each year, so are the duties of the medical inspector. Communicable diseases require his daily attention, and should never be diagnosed by any one except a physician. Control of them requires close coöperation of the Health Officer of the community. Preventive methods now so widely used for immunization against these diseases requires much more time

of the medical inspector. In addition to all this the medical inspector is at the disposal of the athletic department for any injuries or opinion in matters pertaining to the medical side of that department. There is plenty for the nurse and doctor to do and do thoroughly without the addition of questionable ideas.

### ABELL COMMISSION REPORT

(A letter, advising caution with regard to legislative matters, from Dr. Elias J. Marsh, Treasurer of the Medical Society of New Jersey.)

I have received from the State Board of Medical Examiners a copy of the proposed law to consolidate the administrative work of various professional examining boards, together with notes on the experiences of other states where similar plans have been tried. From these it appears that the results have not been altogether satisfactory, and our Board seems to fear that the proposed plan would hinder them in some of the work they are now doing.

S. 304 is one of a series of acts offered by the so-called Abell Commission for the general reorganization and simplification of the state government. The great need of such a reorganization is generally recognized, and I think there is little question among our people that in its main lines the plan outlined by the Commission is wisely and soundly conceived. Perfection in all details is hardly to be expected in a work of this character, and opinions will differ; there are always minor defects which are subject to just criticism. Unfortunately, opposition, even when just in itself, on account of what are really minor points, important though they may seem to those interested, often strengthens the resistance to great and necessary reforms offered by interested persons for selfish reasons. It would be a great misfortune for the state, and a heavy charge against those responsible, if this great opportunity to reform our government should be lost by the aid of objections raised against details, however valid the objections in themselves.

I am not sufficiently familiar with the operations of the Board of Medical Examiners to pass an opinion, but most of the mentioned difficulties appear to me incidental, and remediable by amendment, rather than inherent. But even granting them as serious as the members of the Board seem to regard them, we should remember that we are citizens before we are physicians, and the state is entitled to priority of consideration even before our profession—supposing there is any conflict, which I did not admit. After all, the work of the Board of Medical Examiners, like all other boards, is for the welfare of the people, not of the profession, and if the best advantage of the state demands some sacrifice on our part—mind, I say *if*—it ill becomes that profession which is justly proud of its self-sacrifice and public spirit to refuse it now. By all means let us strive for such changes in the bill as will conserve the advantages for the public service enjoyed by the present board, without lessening the main purpose of the reform, but I sincerely trust that our Welfare Committee and the leaders of our society, as well as the members of the Board themselves, *will not place the society and the profession in the position of hindering in any way the most hopeful promise of civic reform seen in New Jersey in a generation.*

(Signed)—Elias J. Marsh.



**AMERICAN PHYSIOTHERAPY ASSOCIATION**

(A letter transmitted to us by Dr. Harold D. Corbusier, with approval for publication.)

The New Jersey Chapter of the American Physiotherapy Association, a national association of physical therapy technicians organized shortly after the war, has established a registry and appointment bureau for its members in this state.

Requirements for membership in this association are as follows and are approved by the Council on Physical Therapy of the American Medical Association.

Active members are those having had 1 year of practice in physical therapy within 2 years of graduation from:

- (1) An approved School of Physical Therapy.
- (2) An approved School of Physical Education and satisfactory completion of an approved course of physical therapy.
- (3) An approved School of Nursing and satisfactory completion of an approved course of physical therapy.

Junior members shall be persons fulfilling the requirements of active members, except 1 year of practice shall not be necessary; nor shall they have the power to vote.

The standards of ethics of the American Physiotherapy Association shall be as far as possible those of the American Medical Association. *All members shall practice only under the prescription and direction of a licensed physician.* Therefore, only persons having the best possible training may register in this bureau. It is the place to which the physicians may apply when in need of well trained physical therapy technicians either in their private offices or in hospitals.

The registry is under the direction of Miss Jean Smith, Beth Israel Hospital, Lyons Avenue, Newark, N. J. Telephone—Terrace 3-5700.

**VIOLATIONS OF MEDICAL PRACTICE ACT**

(A letter from Dr. J. J. McGuire, Secretary of the State Board of Medical Examiners.)

Schuyler C. Pew, of Perth Amboy, was found guilty of practicing medicine without a license, on September 8, by the Judge of the New Brunswick District Court. Mr. Pew held himself out as a masseur and also gave electric treatments.

Theodore DeDragic, of Atlantic City, who held himself out as a Vienna physician and physiotherapist, was found guilty of practicing medicine without a license on September 10, and on failure to pay the penalty was committed to jail for 30 days.

Erma L. Garwood, of Beverly, who advertised as a masseuse and electrotherapist, pleaded guilty in the Court of Common Pleas of Burlington County, on September 11, to a charge of practicing medicine without a license.

Frank Weber, of Burlington, pleaded guilty in the Court of Common Pleas, of Burlington County, on September 11, to a charge of practicing medicine without a license.

Mary A. Wilson, a psycho-analyst, of Newark, on September 18, paid the penalty for practicing medicine without a license.

Thomas Parusis, of Jersey City was found guilty in the First District Court of Jersey City, of practicing medicine without a license. On failure to pay the penalty, he was committed to jail for 30 days.

Daniel S. Priest, druggist, of Toms River, in

September 1930 paid the penalty for practicing medicine without a license.

Ernest M. Bick, of South Orange, who prescribed medicine to be taken internally, was tried in the Second District Court, Newark, on October 3, on a charge of practicing medicine without a license, and was convicted. He had previously been convicted on January 28.

Lillian Kallila, of Jersey City, on October 7, pleaded guilty in the First District Court of Jersey City to a charge of practicing medicine without a license and paid the penalty.

Aino S. Mateinheimo, of Jersey City, on October 7, pleaded guilty in the First District Court of Jersey City to a charge of practicing medicine without a license and paid the penalty.

Eugene Gebauer, of Newark, who was practicing electrotherapy and hydrotherapy, was found guilty of practicing medicine without a license, by the Judge of the First District Court of Newark, on October 8. He refused to pay the penalty and was committed to jail for 5 days.

Nicklos N. Barron, of Newark, who prescribed medicine to be used both externally and internally, was found guilty on October 20, by the Judge of the Second District Court of Newark, of practicing medicine without a license and paid the penalty.

Abram Taub, druggist, of Pompton Plains, was found guilty of practicing medicine without a license on October 21, by the Judge of the Paterson District Court.

William Miles, of Atlantic City, on October 24, paid the penalty for practicing medicine without a license.

Solomon Boxer, druggist, of Ventnor, was found guilty on October 29, by the Judge of the Atlantic City District Court, of practicing medicine without a license. The defendant had a diploma in his drug store showing that he was a graduate of a college of naturopathy, but prescribed drugs for his patients.

Frieda Korte, of Atlantic City, who was giving electric treatments and colonic irrigations, was found guilty by the Judge of the Atlantic City District Court, on a charge of practicing medicine without a license. This was the third time that Mrs. Korte had been convicted and as she was unable to pay the penalty, she was committed for 60 days.

George Lezenby, Jr., of Atlantic City, a naturopath, was found guilty on October 29, of practicing medicine without a license, by the Judge of the Atlantic City District Court. He failed to appear in Court and the Judge ordered him committed to jail for 60 days, but when the commitment was served he paid the penalty.

Charles Schaefer, Sr., of Oaklyn, in October, paid the penalty for practicing medicine without a license.

Charles Schaefer, Jr., of Oaklyn, in October, paid the penalty for practicing medicine without a license.

Charles S. Newell, of Merchantville, a naturopath, paid the penalty on November 5, for practicing medicine without a license.

Ehrgott W. Gebhardt, of Merchantville, a druggist, paid the penalty on November 5, for practicing medicine without a license.

**COUNCILLOR DISTRICT MEETING**

(A letter from L. Cook Osmun, M.D.)

The first Councillor District Meeting of the First Councillor District will be held on Thursday evening, February 12, 1931, in the Academy of Medicine, Newark. The main address will be

by Dr. W. H. Ross, of Brentwood, L. I., and we are planning to make this a large affair.

### THE WALT WHITMAN

To the Editor: The American Medical Association will hold its annual meeting in Philadelphia June 8-12, 1931, and I am writing that you may announce throughout the state the convenience and desirability of stopping at THE WALT WHITMAN during the period of that meeting.

As you know, we are but 10 minutes from the center of Philadelphia—busses stopping at our doors at all times.

"A New Jersey hotel for New Jerseymen".

Sincerely yours,

Chas. F. Krapp, Manager.

## Current Events

### MINUTES OF THE WELFARE COMMITTEE

Trenton, New Jersey,  
November 9, 1930.

Pursuant to call, regularly issued under authorization of the President of the Medical Society of New Jersey, Dr. George N. J. Sommer, the first meeting of the newly appointed Welfare Committee of the State Medical Society was held at the Stacy-Trent Hotel, Sunday, November 9, 1930.

The meeting was called to order by President Sommer, who announced that the objects of the meeting would be, first, to organize by election of a chairman, and then to transact any business pertaining to the winter's program.

Roll call disclosed the following members present: Coleman, A. H.; Conaway, Costill, Dandois, Davis, Ely, Green, Haussling, Hunter, Lippincott, McBride, McMahon, Morrison, Morrow, Nafey, North, Schaffler, Schlichter, Sewall, Sherman, Sommer, Traey. Excuses were received from Drs. Clayton, Donohoe, D. Leo Haggerty, Londrigan and Ward. Vice-Presidents John F. Hagerty, and Quigley were present by invitation, and Drs. Kelley and McGuire were present from the State Board of Medical Examiners.

The President called for nominations for the chairmanship and Dr. A. H. Lippincott was nominated and elected by unanimous vote. The President thereupon called Dr. Lippincott to the chair.

The Executive Secretary presented the following report:

#### Report of the Executive Secretary to the Welfare Committee

The Executive Secretary has at the moment only a short report to submit. The work of his office has proceeded in routine manner during the summer, and at present everything is progressing smoothly and satisfactorily. The public educational program will be continued this winter as heretofore, and we have reason to believe that radio broadcasting will be conducted under the auspices of 5 county medical societies in whose territory proper facilities exist; to wit: Atlantic, Bergen, Essex, Hudson and Monmouth. The Field Secretary, Mrs. Taneyhill, is carrying a program this year that is even heavier than through previous seasons. With the kindly assistance of the State Board of Education, she has arranged to address nearly all the school organizations of the state, stressing particularly the importance of

mental hygiene, but presenting also on occasion the other lectures of her series.

It is early to predict anything about the approaching General Assembly of New Jersey, but the election returns and certain information that has leaked out from political headquarters permit us to draw some inferences. In all probability, the next State Senate will be in the hands of our friends; that is to say, that Senator Wolber, who has always been coöperative, is said to be slated for the post of President of the Senate; Senator McAllister, of Cumberland, is to be the Republican Senate Floor Leader; and our very good and reliable friend, Dr. Blase Cole, is to be the Democratic Senate Floor Leader. If those selections are confirmed we may feel reasonably safe as regards the Senate attitude toward public health legislation. In the House of Assembly, the situation is less favorable. The Republican slate is said to be—Wise, of Passaic County, for Speaker, and Otto, of Union County, for Floor Leader; the first named is a eulitist of variegated hue and we need expect no favors at his hands.

At the Annual Meeting of the State Society, a resolution was adopted upon motion of Dr. Morrison, seconded by Dr. Quigley, that the Welfare Committee be requested to consider the necessity for or advisability of securing legislation to control or prevent the employment of unlicensed physicians by municipal, county and state institutions. That request is hereby respectfully directed to your attention.

We have not as yet, of course, any specific knowledge of bills to be introduced into the General Assembly but experience leads us to expect the usual crop of objectionable medical bills. The Surgery Control Bill that was under consideration at the Legislatures of 1929 and 1930 is more than likely to make a reappearance. The Welfare Committee of last year left further consideration of that question in the hands of a special committee composed of Drs. John Hagerty, W. G. Schaffler, and Joseph G. Coleman. The special committee on the Hospital Lien Law, under the chairmanship of Dr. Londrigan, accomplished the greater part of its task last year but was held over to consider whether further action in the future is desirable.

There is no other unfinished business.

Respectfully submitted,

Henry O. Reik, M.D.,  
Secretary, Welfare Committee.

At the suggestion of the Chairman, the report was accepted and ordered to be placed on file.

At the request of the President, Dr. Sommer, the Executive Secretary presented a communication from the Mercantile Finance Corporation of New Jersey, with offices at 32 E. Hanover Street, Trenton, which, in effect, set forth a plan for the collection of physicians' bad accounts, and for the loan of money to patients for the payment of medical bills or for the payment of prospective surgical procedures.

Dr. Reik called attention to the fact that a similar proposition, offered by the Gilbert Acceptance Corporation, of Newark, had been rejected last year by the Welfare Committee after a very thorough investigation by the Secretary and, later, by a special committee.

Dr. Sommer stated that he knew nothing about the proposition and presented it only because it had come to him officially.

Dr. North remarked that he had seen a copy of the offer, had read it carefully, and did not con-



sider it worthy of endorsement by the medical profession.

Upon motion of Dr. McBride, the committee voted unanimously to decline further consideration of the proposition.

At the request of Dr. Morrison, the Executive Secretary read a letter received from Dr. Lawrence Greeley Brown, of Elizabeth, N. J., complaining about the manner in which the Medical Bill Adjustment Committee of Essex County had acted in reference to settlement of a professional account rendered to the Aetna Insurance Company for services to an injured man.

After some discussion, it was decided that this matter should be referred to the Essex County Medical Society because the complaint dealt with the acts of a committee in that district.

Quoting from the Transactions of the Medical Society of New Jersey in annual session at Atlantic City June 1930, the Executive Secretary called attention to action taken by the House of Delegates, upon motion of Dr. Morrison, seconded by Dr. Quigley (Transactions, page 42), calling upon the Welfare Committee to consider what action should be taken with reference to the employment of unlicensed physicians by municipal, county and state institutions.

After discussion, participated in by Drs. Kelley, Coleman, Costill, McGuire, Nafey and Morrow, Dr. Morrison moved that this matter be referred to a special subcommittee, to act in cooperation with Drs. McGuire and Kelley, of the State Board of Medical Examiners, for investigation of this question and later report to the Welfare Committee.

The motion was adopted and the Chairman appointed the committee as follows: J. Bennett Morrison, Chairman; R. H. M. Davis and Herbert W. Nafey.

Dr. McBride called attention to the fact that during his presidency of the State Society he had forwarded to the Governor of the state of New Jersey the names of 3 physicians from whom the Governor might select an appointee for the State Board of Medical Examiners to fill the vacancy which would occur at the expiration of Dr. Charles B. Kelley's term, and stated that up to the present time the Governor has failed to act. He felt that the Medical Society is not being accorded proper respect and that the Governor is failing to perform his duty.

Upon motion of Dr. Schauffler, it was decided to request the Chairman of the Board of Trustees to call Governor Larson's attention to this question again, and to support Dr. McBride in his efforts to secure official action.

Both the Executive Secretary, and the Secretary of the Board of Medical Examiners, called the Welfare Committee's attention to newspaper reports of the Abell Legislative Committee's proposal to transfer the work of the Medical Examining Board, and other similar bodies, to the State Board of Education.

After discussion by Drs. McGuire, Schauffler, North, Morrison and Schlichter, a motion was offered by Dr. Schlichter that a committee of 5 be appointed to consider the Abell Committee's report and to later advise the Welfare Committee what action might be advisable.

Dr. McGuire offered as an amendment that the proposed committee be instructed to confer with the Board of Medical Examiners and other similar groups concerned in the proposed change.

Dr. Schlichter accepted the amendment and the amended motion was duly adopted.

The Chairman appointed the following committee: Andrew F. McBride, Chairman; Charles H.

Schlichter, Henry B. Costill, W. G. Schauffler, and T. B. Lee.

Dr. Kelley reported upon the present status of osteopathy and chiropractic in New Jersey, saying that he did not believe either of these groups would attempt to secure special legislation this year but that he anticipated an effort on the part of the naturopaths to procure special privileges.

Dr. John Hagerty, as Chairman of the subcommittee on the Surgery Bill, stated that his committee would report at a later meeting.

The Executive Secretary presented a document prepared by Dr. Morrison in explanation of the State Society work and the manner in which the Society's funds are expended, and recommended that this be printed in the form of booklet previously used with reference to auxiliary matters and in explanation of cultism, and that these booklets be distributed for the edification of members of the State Society and for the use of officers of county societies in collecting dues and in procuring new members.

A motion was duly passed authorizing publication and distribution as recommended.

The meeting then adjourned.

Henry O. Reik, M.D.,  
Secretary, Welfare Committee.

### SPECIAL MEETING

A special meeting of the Welfare Committee was held at the Stacy-Trent Hotel, Sunday, December 14, at 3 p. m., with the Chairman, Dr. A. Haines Lippincott, presiding.

The following members answered to roll call: Bloom, Clayton, A. H. Coleman, J. G. Coleman, Conaway, Dandois, Davis, Donohoe, Ely, Green, D. Leo Haggerty, Hunter, Larkey, Lippincott, Londrigan, McBride, McMahon, Morrill, Morrison, Mulford, Nafey, North, Schauffler, Schlichter, Sewall, Sherman, Sommer and Tracy. The following sent excuses: Brown, Haussling and Lee. The following invited guests were present: John F. Hagerty, Paul M. Mecray and James J. McGuire.

The Chairman called for the report of the Executive Secretary, and Dr. Reik asked permission to present his report in sections in order that the first section might be acted upon as promptly as possible because some members interested in that portion of his report would want to be excused at 3.30 p. m. to attend another meeting.

#### REPORT OF THE EXECUTIVE SECRETARY

##### (Section 1)

There are several matters of interest to be presented to the committee today, but inasmuch as there is to be another meeting at 3.30 p. m., which must be attended by some of our members, a conference of representatives of organizations affected by proposed legislation growing out of the Abell Commission's report, it seems best to list that subject first.

Since the last meeting of the Welfare Committee, on November 9, the Abell report has been made public and several legislative acts designed to convert that commission's recommendations into law have been introduced into the General Assembly. On Saturday, November 29, Dr. McBride and the Executive Secretary traveled to Morristown for an interview with Senator Abell, the results of which were quite satisfactory. On December 1, Senate Bill 304 was introduced, and the 3 bills which affect the State Board of Medical Examiners have since been made available for study. S. 260 provides for establishment of a centralized

control and uniform system of accounting for the money received and expended by the state. S. 262 provides for an improved budgeting plan to take the place of the existing unsatisfactory method. S. 304 is a special act designed to bring all of the Boards of professional examination and licensure under a central bureau in the State Department of Education. It is the last named bill which has caused most public discussion, though objection has also been made to S. 262. On Sunday, December 7, representatives from several of the professions and Boards met in Trenton to confer with our own subcommittee under the chairmanship of Dr. McBride; the other groups present including particularly the dentists, pharmacists, and undertakers and embalmers. On Thursday, December 11, at a public hearing on S. 262, we were represented by President Sommer. Announcement has been made that a public hearing will be given Tuesday, December 16, on S. 304.

At this point I wish to ask your consideration of 2 or 3 possible danger spots in the manner of dealing with this proposed legislation. First, permit me to warn against a too intimate alliance with the organizations that are opposing this legislation. That phrase may sound queer, coming from me, in view of my previous efforts in the direction of coöperation. It was I, for instance, who 3 years ago brought about the coöperative relationship with the pharmacists. But, please keep this in mind—that while I have always advocated coöperation, I have never recommended *amalgamation*. We may, indeed we should, confer with the other organizations, but we should be extremely careful to avoid responsibility for actions they may take, and extremely cautious about entering into any conference that may involve us in an obligation to support a majority decision. That is a very important point to keep in mind. Already, newspaper articles have appeared from one of those groups that our society certainly could not endorse.

I am informed that at the public hearing last Thursday some of those groups were represented by special agents, attorneys, and ex-members of the legislature. I trust this society will not be led into joining in such a procedure or into following that example. It would be derogatory to the dignity of our profession and it would be injurious to the standing we have acquired through 6 years of following a different policy. Incidentally, such methods rarely, if ever, accomplish the intended purpose, and they do constitute a waste of money. *Members of this group present today can better represent you and accomplish more satisfactory results than can any attorney or paid lobbyist in the United States.*

Further, permit me to express the opinion that we are in grave danger of being swept into a false position through the influence of mob psychology. The appearance of these legislative bills, indeed the preceding newspaper stories about what the Abell report *would* contain, planted in our minds a *fear* that something terrible was going to happen. That fear has grown to the point where we are in danger of acting unreasonably. I have heard much talk about these bills but most of it has been irrelevant, based upon fear rather than study of the bills, and some of it has *entirely misrepresented* the apparent intent and the *actual wording* of the bill. I have heard it argued that these bills propose abolition of the Boards of Examiners, substitution of examinations by persons incapable of conducting appropriate examinations, the employment of an immense force of adjunct employees to carry on the work, and the application of funds properly received by the

Boards to State work other than that heretofore carried on by the Boards. There is not a word in either of the laws to justify any of those criticisms. I am not a prophet and I cannot predict with certainty what will happen if those laws are enacted, but that is not the question before us at the moment; the question calling for our first consideration is—what do these bills propose?

I do not see how the medical profession can consistently oppose bills 260 and 262, for they offer to the state exactly what all good citizens have been demanding whenever the wastefulness or the dishonesty of state government has been under discussion. S. 262, to which exception has been noted, proposes for the state exactly what this society has had for years and what it held so precious as to rewrite into its new Constitution and By-Laws. The budget system and central control of all monies is one of the cardinal principles of the business conduct of this society.

What does S. 304 say? Stripped of all excess verbiage, which for some inexplicable reason is made a part of all legislative acts, it provides:

(1) For creation of a bureau within the Department of Education "for the centralization of the records" and "for the administration of the financial operations of the several examining and licensing Boards", at the same time "preserving the entity and identity" of such Boards, and that all monies received by such Boards "shall be paid into the State Treasury" and that all expenditures of said Boards shall be in accord with the state budgeting system.

(2) Authority is conferred upon the new bureau, specifically, "to manage and regulate the *financial operations* of the several Boards"; to "receive and pay over to the State Treasury all monies collected by the Boards"; and to issue licenses and certificates of registration *when and as approved by the said Boards*".

(3) "Requests for appropriations shall be submitted by said Boards to the bureau", and the bureau shall pass approved requests to the Budget Committee, which in turn submits a report to the Legislature as a basis for the appropriation of funds, "to the end that expenses for maintenance, operation and administration of said Boards *shall be appropriated from the funds collected by the Boards or from the free treasury funds of the state*".

(4) "Nothing contained in this act shall be construed to conflict with the examining, regulating and general supervisory functions of the State Boards."

I am unable to detect anything very alarming in those provisions. I would suggest 3 slight changes, in the form of amendments: I believe that administration of the bureau might better rest with the *Board of Regents* than with the Commissioner of Education; that is, something comparable to the New York plan. Secondly, a verbal change in the provision for appropriations might be made so as to *assure* annual appropriation of a sum *not less than* that of the receipts of the Board. At a meeting of the Tristate Medical Conference one week ago, I reported our concern over this pending legislation, and the President of the Pennsylvania Society, Dr. Ross V. Patterson, Dean of Jefferson Medical College, and who is better informed than most of us concerning medical education and Medical Licensing Boards, stated that Pennsylvania now has practically the same legal provisions and that he would advise us to accept the proposed laws because he believes they will work out to our advantage. The experiences of New York and Pennsylvania constitute the answer to some of the protests that this



proposed legislation is unique and impracticable. Thirdly, I would insist that the State Bar Examining Board and the Realtors' Board be included in the law.

The most pronounced criticisms of the Abell Commission plan seem not to be based upon the proposed laws themselves but upon suspicion and fear of how such laws may be enforced. That is a criticism of the American political system rather than of these special acts, and I think we should study these acts carefully before assuming a public stand in opposition.

*The Chairman:* The first section of Dr. Reik's report is before you for action.

*Dr. McBride:* I am opposed to the transfer of these licensing Boards to the Department of Education for the reason that I am afraid such transfer will enable, or will result in, bringing these matters under control of politicians. As to substituting the Board of Regents for the Commissioner of Education, I would like first to know something more than I do now about the Board of Regents.

As to S. 262, I think we should insist upon a return to our Board of all the monies turned into the Treasury by the Board. That amendment, suggested by Dr. Reik, is a good one.

*Dr. Schauffler:* I wonder if Dr. Sommer would like to tell us something about the hearing on 262 last Thursday.

*Dr. Sommer:* A hearing was held on that bill last Thursday and I attended along with representatives of the dental and pharmaceutical associations, as arranged at the conference last Sunday. It seems that there is to be another hearing on that bill, for I have received a message stating that S. 262 and S. 304 will be considered further at the hearing announced for Tuesday, December 16.

The main opposition to 262, as developed last Thursday, was on the score of "dedicated funds" Everybody wanted to know what dedicated funds meant. The school teachers, for instance, feared that might interfere with their pension fund, and I noticed that their attorney, Mr. McCarter, wanted an assurance written into the bill to make it clear that such fund would not be interfered with.

Dr. Liva spoke for the Medical Examining Board and the medical profession and Dr. Forsythe, of this city, spoke for the dentists. The conference committee, of which I am a part, came to the conclusion that it would be wise to have an attorney's opinion on some parts of these bills and has asked Mr. McCarter to interpret those bills in so far as they relate to the medical profession. Senator Richards, who did most of the cross questioning, tried to keep away from any promise guaranteeing a return to the Boards of their own funds.

*Dr. McBride:* We had a meeting of the Passaic County Medical Society last week and passed resolutions opposing S. 262 and I will ask Dr. Reik to read those resolutions.

*Dr. Reik:* Several of the county societies have passed such resolutions and I have been informed of such action by the Atlantic, Monmouth and Passaic County Societies and by the Physicians' Association of Woodbury. The Passaic County resolutions, asked for by Dr. McBride, are as follows:

"We the members of the Passaic County Medi-

cal Society, respectfully request that you oppose Senate Bill number 262 in its present form.

We contend that unless the bill is amended to make mandatory an annual appropriation equal to the amount of money collected by the State Board of Medical Examiners during the year the cause of public health will be endangered.

This money is necessary for the proper execution of the work engaged in by the State Board of Medical Examiners in the interest of public health. We feel that this money should be available to the Board without any uncertainty of appropriation.

We know that it has always been the desire and wish of the State Board of Medical Examiners to have its accounts audited by the proper authorities and we heartily endorse this principle."

*Dr. Morrison:* I move that we endorse and adopt the resolutions sent by the Passaic County Medical Society.

This motion was seconded and unanimously adopted.

*Dr. Morrill:* I understand that action applies only to S. 262.

*Dr. Morrison:* Yes. Now as to S. 304, I feel that we have perhaps not sufficiently studied that bill to justify flat opposition. I have read the act carefully and it seems to me to guarantee keeping the examining and licensing in the hands of the respective Boards; it doesn't propose to do anything to such Boards except to govern their money affairs. I am inclined to think it would be a good thing to approve this legislation if we can secure the amendments that have been suggested.

*Dr. Hunter:* I would like to ask how the Board of Regents is constructed, whether by appointment or by election, and whether anybody here knows the members of that Board?

*Dr. Schauffler:* I know the President of that Board very well indeed, and am sure that Mr. Jeffers is a thoroughly trustworthy individual.

*Dr. Morrison:* I would like to say that our limited experience with the Board fully justifies that recommendation. When the Chairman of our Post-Graduate Instruction Committee and the Executive Secretary had occasion to confer with the Board of Regents regarding plans of the State Medical Society and Rutgers University, Mr. Jeffers treated them with the utmost courtesy, showed great interest in our educational work, and promised his hearty support. I have thought for several years that this society should endeavor to secure an association with the Board of Regents similar to that existing in New York.

*Dr. Morrill:* I think that Dr. Reik and Dr. Morrison have hit the nail pretty squarely on the head in regard to these bills, namely, that the greatest objection is to placing the Boards under the control of the Commissioner of Education. Such a change as is proposed would bring these Boards under the control of one individual, and that individual filling a position by political appointment. If the Board of Regents could be substituted for the Commissioner of Education, the bill would be vastly improved. In fact, the bill does not otherwise read badly.

*Dr. Schlichter:* I also think this substitute would be a good one and for the reasons just expressed by Dr. Morrill. I am skeptical about giving too much power to the State Board of Education, and I say that because there seems to have been lately

a movement all over the country, on the part of these Boards, seeking for more power.

*Dr. Morrison:* I move that the suggested amendment, providing that the Board of Regents shall be substituted for the Commissioner of Education, in S. 304, be endorsed.

The motion was seconded, but was defeated by vote of the committee, after lengthy discussion of the bill and its possible effects by Drs. McGuire, Reik, North, Hagerty, Lippincott, Hunter and Davis.

*Dr. Londrigan* moved that the Welfare Committee express its opposition to the entire bill—S. 304.

The motion was seconded and carried.

#### REPORT OF THE EXECUTIVE SECRETARY

##### (Section 2)

Next, Mr. Chairman, I would like to report that in response to a call from the Legislative Bureau of the American Medical Association, I have filed with each of the Senators and Congressional Representatives from New Jersey protests against 2 bills now under consideration by Congress (1) An Antivivisection Bill applicable to the District of Columbia but announced intended as an entering wedge for similar legislation relating to the states; (2) the Jones-Cooper Bill which constitutes an attempt to reenact the old Sheppard-Towner law. As indicating our relationship with legislators, resulting from the plan of direct personal appeal in the name of the State Society, it will interest you to know that out of our delegation of 14 members written to, we received prompt answers from 10; 1 of them replying by telegram, and all of them expressing thanks for the information supplied.

*Dr. Lippincott:* I think we should endorse the the Secretary's action in this matter, and trust somebody will so move.

*Dr. Conaway* offered a motion endorsing the Secretary's action and instructing him to continue opposition to the Antivivisection and the Jones-Cooper Bills.

The motion was seconded and unanimously adopted.

#### EXECUTIVE SECRETARY'S REPORT

##### (Section 3)

At one of our sessions last year, we had under consideration a form of health department blank to be used by physicians in recording information required by law to be made available to the Crippled Children's Division of the State Rehabilitation Commission at that time objections were made to the several forms under consideration. On December 4, Mr. Buch, the Chairman of that Commission, called to see me for the purpose of submitting a new record form. He has endeavored to reduce the requirements to the lowest limit, and the present proposition is to utilize the customary Health Department blanks for births and still-births, adding to such books of blanks, in the front portion, several blank forms to be used when necessary. On the regular blanks would be printed a line directing attention to the necessity for filling the special blanks whenever there exist deformities that should be reported. The special blank provides for recording the name, address, date of birth, type of deformity, whether under treatment or referred to other physicians or surgeons, and the signature of the attending physician. The Commission and the Health Department would like to have immediate considera-

tion of this matter so that if approved the certificates can be prepared for new blanks about to be ordered by the Department.

*Dr. Ely:* As Dr. Reik has stated, this matter was before us a year or more ago and it seemed impossible then to agree upon a satisfactory method of making these records. I move that we approve of the plan he has submitted today.

The motion was seconded and adopted.

#### REPORT OF EXECUTIVE SECRETARY

##### (Section 4)

The National Bureau of Economic Research, in letters dated December 2, appealed to Drs. Sommer and Morrison for information regarding medical care on an insurance or contract basis, in New Jersey. The Bureau asks: "(1) Do you know of any hospitals or group clinics in your state that are offering medical service to individuals or to employers (for the benefit of their employees) on a contract basis? The essence of the contract is of course an agreement on the part of the hospital or clinic to furnish a certain type of service during a stipulated period of time in return for a fixed fee paid by the contract holder. (2) Do you know of any corporations or associations offering such service and arranging with medical practitioners and hospitals to give the medical service?"

A proper response to this request would necessitate an investigation that would involve considerable time and labor for some person or committee, and we submit the proposition for consideration.

*Dr. Haggerty:* I move the appointment of a subcommittee to consider this question and report later to the Welfare Committee.

The motion was seconded and adopted. The chair appointed Drs. D. Leo Haggerty, Chairman; Francis R. Haussling and Samuel A. Cosgrove.

#### REPORT OF EXECUTIVE SECRETARY

##### (Section 5)

At the last annual meeting of the State Medical Society a great deal of time was devoted in the general sessions and in sessions of the Section on Ophthalmology, to discussion of the Workmen's Compensation Laws. The December issue of the Journal carries one of the most instructive discussions of that subject that we have seen, and the January issue will carry the papers and discussions that were associated with the appearance at our convention of the medical representative of one of the large insurance carriers.

Our neighbor states, with compensation laws more or less like our own, and with problems of similar character to those that have arisen in this state, have also been giving attention to this matter. The New York State Journal of Medicine of November 15, 1930, presents us with an agreement that has been made between the Medical Society and the Compensation Carriers—an agreement which seems to offer a solution for most of the difficulties complained of. I have a copy of that agreement at hand, but I would not claim to be competent to say that it is applicable in all respects to conditions in New Jersey. I would like to suggest that it be immediately taken under consideration by some one or some committee competent to advise the Welfare Committee and the State Society with reference to this matter.

*Dr. Morrison:* This is a matter that deeply concerns the Medical Society of New Jersey and I move the appointment of a subcommittee of 5 to study the documents that Dr. Reik is prepared



to present, and to advise us as to their application to New Jersey conditions.

*Dr. John Hagerty:* In seconding that motion I want to say that I attended a meeting in Newark recently at which this same matter was discussed and I think that the New York agreement is applicable to most of the conditions existing here with reference to our Workmen's Compensation Act. I will be glad to serve on that committee if you think I can be of any assistance.

*Dr. Lippincott:* It is so unusual to have anyone volunteer for work that I think we can assure you, Dr. Hagerty, your offer will be accepted.

The motion was then unanimously adopted. The chair appointed Drs. J. Bennett Morrison, Chairman; John F. Hagerty, H. B. Costill, Millard F. Sewall and B. C. McMahon.

*Dr. Reik:* During the last 2 legislative sessions, Dr. Leo Haggerty has looked after certain affairs for the Welfare Committee, particularly by keeping us informed of the exact status of legislation pending in the General Assembly. Being required to subscribe to the New Jersey Legislative News, he has expended for such information the sum of \$25, for which amount he should be reimbursed.

A motion duly made and seconded authorizing payment of this bill.

*Dr. Morrison:* I would like the Welfare Committee to submit to the House of Delegates of the Medical Society of New Jersey, at its meeting in June next, a request that this committee be given permission to draft an amendment to the Medical Practice Act giving us power similar to the Grievance Committee, provided for in the New York law.

Dr. Morrison's motion was seconded and unanimously adopted.

The meeting then adjourned.

Respectfully submitted,

Henry O. Reik, M.D.,  
Secretary.

## Woman's Auxiliary

### THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN OF NEW JERSEY

Edward J. Ill, M.D.

(An address delivered before the Woman's Auxiliary of the New Jersey State Medical Society at the Annual Meeting June 12, 1930.)

I am thankful to be able to present to you some facts which should of necessity interest you. If it is not for your personal benefit, you should be aware how many doctors leave their families in a destitute condition and how our society has been able to relieve much real distress.

The Society for the Relief of Widows and Orphans of Medical Men of New Jersey has been in existence for 40 years. It has 500 members. At the annual meeting on May 14, the Treasurer reported a Permanent Fund of \$44,930. The income from the Fund amounted to \$2316.63. This income may be distributed to such widows and orphans as in the opinion of the trustees is thought wise. The trustees wish to help such as are in need. It is not considered a charity by the trus-

tees but a right to which such widows and orphans are entitled.

I am asking you now to present to me the names of such widows and orphans of members, who are in need, so that the trustees may take such action as they think wise to give some relief. It has been most difficult to get the names of such as are in need. A false modesty, or let us call it pride, may be at the bottom. Let us remember that the needy have a right to request aid.

During the past year we have distributed \$850 to such widows. No doubt we could do better if we knew to whom to send help.

It may interest you to know of a few instances of which the trustees have been able to learn and where they have given relief.

There is Mrs. S., the widow of a very active former member of the State Society. He left her with an income of less than \$15 a week, and a hopeful son of grammar school age. With the little help we could give her, being an energetic woman, she got along. Suddenly her son, after leaving college, got sick with an incurable disease.

Then there is Mrs. W., left with 3 little children and no help.

Mrs. N. was an old lady when she became a widow. We helped to get her into an old ladies home.

Mrs. V. was left with 6 children ranging from 2 to 15 years of age, after her husband had died from pulmonary phthisis of some years standing and during which time their little savings had dwindled to almost nothing.

Mrs. T. had a husband, who had been sick and helpless with chronic arthritis. For years he earned nothing, and we were glad to make him a loan while he was living and then helped the widow until such time as she could look out for herself.

Mrs. G. retired to the country. Two of her half-grown-up children got sick with phthisis. We were glad to help her.

Mrs. H. was left with 5 little children after Doctor H. died from a long illness of heart trouble. She certainly needed our help.

Dr. E. left a widow, well advanced in years. He was an old man when he died. He had lost all during his declining years when sickness prevented following his occupation.

I might go on relating many more deplorable instances. In 9 years we have distributed but \$4400. During this time we have also made loans to sick doctors to the amount of \$720. This, of course, came back to us from the death benefits but was soon returned to the widows as a gift.

You will be surprised to learn how many widows are in immediate need of funds after the doctor's death. With the usual poor business ability of our profession, no provision has been made for any immediate help. Thus, a very busy surgeon died within the year. There was not enough money to pay the grocer. Our check came as a great relief and we were glad to be able to send it within a few days of the doctor's death.

I am showing you what amount we have paid out annually during the past 11 years.

Amount paid heirs of members each fiscal year ending May 1: 1920, \$4250.25; 1921, \$1197.75; 1922, \$3856.50; 1923, \$2430.50; 1924, \$3956.00; 1925, \$4317.25; 1926, \$5467.75; 1927, \$2126.75; 1928, \$3617.25; 1929, \$5633.75; 1930, \$5307.75.

If your husband is not a member please prevail on his becoming one. Please correspond with me or the Secretary, Dr. Wm. D. Minningham, 18 Hedden Terrace, Newark, N. J.

I want to thank you for giving me a hearing

and am open to any questions you may want to put before us.

I also want to express my appreciation to your President, Mrs. Hunter, as well as Mrs. Clark, Chairman of your Program Committee for their kindness to me.

### WINNING THEM OVER

At a meeting of the Secretaries of County Branches of the Wisconsin Medical Society, held at Milwaukee, March 1, 1930, the President of the State Society, Dr. F. J. Gaenslen, said: "I am glad to see that one of the subjects on the program is that of the Woman's Auxiliary. While I was not keen about that some months ago, the more I think of it, the more I feel it is going to be a powerful influence in the formation of public opinion regarding matters pertaining to medicine and to public health in general."

### STATE AUXILIARY

The Woman's Auxiliary to the Medical Society of New Jersey will hold a luncheon meeting at the Stacy-Trent Hotel, in Trenton, on Monday, January 12, at 1 p. m. Mrs. Walter Jackson Freeman, of Philadelphia, will be the guest of honor and there will be guests from the neighboring states of Pennsylvania and Delaware. Mrs. Freeman will outline plans for the meeting of the National Auxiliary to be held during the session of the American Medical Association in Philadelphia from June 8 to June 12. She will tell the State Auxiliary how much depends upon it in the line of hospitality.

Mrs. John Nevin, the President, will preside and she will help formulate a program for our activities during the meeting of our State Society at Asbury Park the first week in June.

Please send acceptances promptly to Mrs. George N. J. Sommer, 120 West State Street, Trenton, New Jersey.

### Bergen County

Reported by Mrs. Michael Sarla

The regular monthly meeting of the Woman's Auxiliary to the Bergen County Medical Society was held in the form of a luncheon on December 9, at "Ye Chestnut Tea House" in Bogota with 23 members present.

Mr. and Mrs. B. C. Wooster, of the County Board of Education, were our guest speakers.

Bridge was played during the remainder of the afternoon.

### Gloucester County

Reported by Mrs. Henry B. Diverty

The Woman's Auxiliary to the Gloucester County Medical Society had luncheon at the Woodbury Country Club November 17 at 1 p. m., under the auspices of the American Homes Department of the Women's Clubs, to hear Dr. Ellen Potter, Director of Medicine in the State Department of Institutions of New Jersey.

On November 20 the Auxiliary met at the Woodbury Country Club at the same hour of the doc-

tor's meeting, the president, Mrs. E. Downs, in the chair: 14 members and guests were present. Following the business meeting Mrs. James Hunter, Jr., of Westville, ex-president of the State Auxiliary, gave a detailed report of her trip to the Johnstown, Pa., Convention the week of October 6 and stressed the efficiency with which it was conducted. She also reported as 1 of 4 vice-chairmen on the State Program Committee for entertainment of the guests of A. M. A. Convention to be held June 8 to 12, 1931, in Philadelphia. Plans are well under way, under the very efficient leadership of Mrs. Freeman, of Philadelphia. After adjournment the doctors and Auxiliary were ushered into the dining room where a wonderful repast was served by our new chef at the Woodbury Country Club.

### Hudson County

Reported by Anne Hetherington

The regular meeting of the Woman's Auxiliary to the Hudson County Medical Society was held on November 14 in the Jersey City Y. W. C. A.

Announcement was made that on January 21, in the Stacy-Trent Hotel at Trenton, an open executive meeting will be held, followed by a luncheon at which the president, Mrs. John Nevin, hopes to see a large representation from Hudson County.

The event of the day was a lecture on "Adult-Child Psychology" by Miss Flack, member of the Child Development Institute of Columbia University. Miss Flack commended those present for their interest in her subject, which is engaging almost universal attention. She explained the urgent need of a new psychology to solve the problems of the modern parent and child since the whole fabric of living has changed in the last 10 years. Instead of the old-fashioned home with its garden and attic play-grounds, we have the small apartment where the mother has a 24 hour contact with the child. Irritability is the natural result of such emotional strain. Perhaps George Bernard Shaw had an over-burdened mother in mind when he made the statement that the only autocracy left in the world today is the home, where the worst tempered member always rules. It is the purpose of the newer methods to lessen difficulties of that hardest but most important job in the world—raising a family. Psychologists are opening the way to a better understanding of child behaviorism and many believe environment to be the strongest influence in human training. Scientists differ on this score, some declaring the adult to be 80% the result of heredity and only 20% of environment, but since not much can be done with heredity any way, the more plastic factor, environment, remains the hope of the race.

A social hour was enjoyed after the lecture.

The following new members were welcomed: Mrs. O. R. Blanchard and Mrs. E. J. Daly, of Jersey City; Mrs. Joseph Londrigan, Mrs. H. Broesner, Mrs. J. Rosenkranz and Mrs. W. W. Farr, of Hoboken; Mrs. H. Schwartz, North Bergen; Mrs. William Eckert, Union City; Mrs. E. Bailyn, West New York; and Mrs. Charles Larkey, of Bayonne.



## County Society Reports

### ATLANTIC COUNTY

John Irvin, M.D., Reporter

The regular monthly meeting of the Atlantic County Medical Society was held in the Blue Room of the Chalfonte Hotel on Friday evening, December 12, at 8.30 p. m., with 95 in attendance, including Dr. George N. J. Sommer, President of the State Society, and Dr. J. B. Morrison, Secretary of the State Society.

The minutes of the previous meeting were read by Dr. Joseph H. Marcus, secretary.

Dr. Homer I. Silvers, president, called for reports of the various committees.

**Board of Censors** by Dr. Clarence Andrews: The applications of doctors who have just graduated or who have not been practicing for 12 months will be held over for 12 months. This is no reflection upon the man himself, but is merely a custom.

**Public Health and Sanitation** by Dr. W. Blair Stewart: The matter of broadcasting was brought up at the last meeting. Dr. Reik has been investigating that subject. A motion was passed that the incoming president appoint a committee to arrange for broadcasting of health talks over WPG.

**Dr. Stewart** spoke of the Abell Bills now before the state legislature to reorganize the state business and the state budget. Dr. Stewart stated objections of the Board of Medical Examiners and said he would like to see the society vote unanimously against these bills.

**Dr. Sommer** spoke about S. 262 which provides for putting all state funds in a budget system, including all funds received from licensing candidates. While the proponents of this bill assure us that there will be no difficulty about allowing funds for the prosecution of illegal practitioners, there is nothing definite in the bill about this matter. When one deals with politicians one must not take anything for granted.

**Dr. Darnall** also spoke against these bills and urged all who could to be present at a hearing on the bills in Trenton.

A motion was unanimously carried that the society go on record as opposed to Senate bills 262 and 304 and that a copy of the motion be sent to our senator and assemblymen.

**Dr. Morrison** read a paper on the menace of state medicine, explaining its present status and asking all to concern themselves in order that we may find a relation satisfactory to the public and to the profession.

**Dr. W. P. Conaway** spoke about a notice he had received from the Narcotic Department of the Government. This notice stated that if the narcotic tax is not paid medical men are subject to a fine of \$2000 or jail for 5 years. Previously the fine was 75% of the amount of the tax. He suggested that steps be taken to find out what this means. Dr. Stewart replied that he has already written to the authorities for an explanation.

**Dr. J. H. Marcus** read a letter from another collection agency which desires to enter into relations with the society. The communication was laid upon the table.

A letter of appreciation was received from the Atlantic Visiting Nurses' Association.

Dr. Marcus also spoke about the collection of dues. Out of 130 members, only 35 have paid their dues. The official list closes January 25,

and those who are not paid up before that time will not have their names listed and will not receive their Journal.

Dr. Silvers introduced the speaker of the evening, Dr. John Deaver, who read an interesting paper on "The Acute Abdomen". Discussion followed by Drs. Stewart, Senseman, Scanlan, Allman and Deaver.

### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The stated monthly meeting of the Atlantic City Hospital Staff was held November 28 in the Nurses' Auditorium, with Dr. David B. Allman presiding.

The program presented was that of the Medical Service, Dr. Clarence L. Andrews, Chief, and Dr. Hilton S. Read.

Dr. Read presented a survey of the months of August, September and October; 169 patients being admitted, of whom 90 were males and 79 females.

**Dr. J. N. Reeves**, resident physician, reported an interesting case of "Ruptured Abdominal Aneurysm". C. P., aged 32, male, colored, was admitted complaining of pain in the epigastrium, coughing and vomiting of blood (?). Father died of carcinoma, 5 yr. before, but further than this no hereditary taint discoverable. Onset of trouble 3 days before admission. Went on a "drunk" and stayed under the influence of alcohol for 2 days; then began to feel weak and this weakness was accompanied by distress in the epigastrium. This terminus increased in severity, giving a severe burning sensation in the region of the stomach. On the same day he commenced to vomit, which continued until his death. His appetite remained good but he could retain no food. On the day of admission vomited about a pint of dark red blood, which gave him great relief. He thought that he passed some blood in his stools on several occasions before admission. Pulse rapid, irregular and weak; B. P. 105/70; temperature 102.5°; heart, slight enlargement to left; aortic area of dullness slightly widened; no bruit, thrill or murmur heard. Patient had a hacking cough productive of a slight blood-tinged expectoration. The lungs were negative except for roughened breath sounds and a few moist crackling râles at the left base posteriorly.

Distinct tenderness and slight distention in the upper abdomen. Blood count 4,200,000 red cells and 9000 leukocytes of normal differentiation. Wassermann and Kahn tests negative. Urine of no significance, and deep reflexes normal.

Condition grew progressively worse; cough more annoying; pain more severe in the epigastrium; vomited several times during the first day and pulse rate dropped from 124 on admission to 60; temperature remained 102°. On the second day vomiting continued and he had what was apparently a pulmonary hemorrhage of about 3 oz. blood. There developed both a pericardial and pleural friction sound in the left axilla, with considerable boggy of the left base posteriorly but no evidence of fluid or consolidation.

The patient was being treated for a probable alcoholic gastritis and pneumonitis. On his third and last day after admission he had apparently 3 pulmonary hemorrhages of 3 oz. each following severe attacks of coughing and vomiting. His symptoms grew worse from 3 p. m. to 2 a. m. when he died rather suddenly, remaining con-

scious to the end; temperature fell gradually from 102° to 97°, and pulse jumped from 75 to 155, and interceptability in his last hours.

**Autopsy.** The left pleural cavity was literally filled with clotted blood and the lung greatly compressed. Tracing the descending aorta a clot about the size of a baseball was found just above the diaphragmatic hiatus, removal of which disclosed a hole in the aorta about 2 cm. in diameter. The stomach was entirely normal. Anatomic diagnosis—ruptured aneurysm of descending thoracic aorta.

The chief mistake in diagnosis was brought about by paying too much attention to his recent history. With the knowledge of gastric insult from excessive use of alcohol in the preceding few days, and the main symptoms abdominal on admission, it was hard to lose sight of this possibility when the signs and symptoms persisted in the epigastrium and became more acute even as new signs made their appearance in the thorax. It is sufficient lesson that although a history is indispensable in making many diagnoses it may be at other times very misleading.

**Dr. Moore** presented the following case of "Tetanus". C. D., colored female, aged 58, admitted because of stiffness involving her jaws, legs and back and twitchings of her arms. Recalled no childhood diseases. In 1904, sustained a dog bite on her left ankle and has been subject to intermittent periods of ulceration of that area since that time. She last felt very well August 4, after which time she was subject to stiffness of her neck, back and extremities. On August 5 she worked at home ironing clothes all day but that evening became somewhat worse and called in a physician. She noticed on August 6 that her jaws were becoming stiff and she had some difficulty in eating, and so remained at home in bed until August 10, at which time, being subject to more marked rigidity of the jaws, legs and back and associated muscular contractions in her upper extremities, she was admitted to this hospital. The ulceration on her left ankle became swollen and inflamed at the time she noted the stiffness. On admission she suffered from urinary incontinence but often before she had been subject to this condition. Her bowels were normal and her mentality unimpaired.

Observation revealed sudden contractions, tonic in type, involving the flexor muscles of the upper extremities, occurring at irregular intervals and seemingly painful. Tetanus was the diagnosis made upon admission and immediate administration of tetanus antitoxin was begun. It became necessary to relax this patient before intraspinal administration was possible. Intravenous sodium amylal (9 c.c.) was given and relaxation obtained except for the legs and spine. A cisterna puncture was successful and 10,000 units antitoxin were administered. The next day an order was written for 10,000 units every 6 hours day and night, to be given intravenously, and the following day we gave in addition 20,000 units into the cisterna. Because of impending dehydration, 500 c.c. of 5% glucose in normal saline were given intravenously. August 14 she was able to open jaws somewhat further and liquids by mouth were given. This was the first day, 4 days after admission that any appreciable improvement was evident. From day to day following the improvement in the muscles of the jaws there was a gradual general improvement and on August 30 toxin therapy was discontinued.

**Dr. Lucas**, resident physician, detailed the following case of "Pernicious Malaria". Mr. and Mrs. J. R., aged 53 and 48 respectively, died from a malignant infection of malaria, within 24 hours after admission to the hospital. Family history was negative, and the personal histories had no bearing on the present conditions except for the fact that they never previously had malaria and were never in the South until this fall. At onset of present illness they were just completing a motor trip through the South. Just 11 days before onset they spent a night in a mosquito infested community in the Everglades.

Onset of illness occurred 5 days before entering hospital and was ushered in by malaise, headache chilliness and coryza anorexia. Within 2 days they were suffering from chills and sweats at irregular intervals. By the fourth day the man developed jaundice of rather marked degree. He complained more of headache and generalized muscular pains especially of the back and neck muscles. The woman had more gastro-intestinal symptoms; abdominal cramps, nausea, vomiting and diarrhea. On admittance they were practically moribund. The man was in medical shock; delirious, skin cold and clammy, pulse rapid and irregular, and it was impossible to measure blood pressure. He was markedly jaundiced, and examination revealed an enlarged spleen, the lower border of which could be palpated 2 finger-breadths below costal margin on anterior axillary line. Liver not palpable.

The woman was extremely toxic, and assumed the position in bed of one suffering from severe abdominal pain; legs flexed on the abdomen and she made continuous pressure over the epigastrium with her hands. She was rather obese. It was impossible to palpate any mass in her abdomen. She was not jaundiced.

The man had a leukocyte count of 21,000 with 77% polymorphonuclears. The woman also had 21,000 white cells with 92% polys in differential count. Signet-shaped malaria parasites were present in enormous numbers in blood smears from both patients.

Treatment of the man consisted in measures to combat shock and provide cardiac stimulation. The woman was given quinin hydrochloride intramuscularly every 6 hours, and the same amount by mouth every 3 hours. The man died 14 hours after admittance; never reacted completely from shock. The woman died 22 hours after admittance. Necropsy was performed on the man and the spleen was 3 times normal size.

**Dr. Robert A. Kilduffe** demonstrated the presence of malaria parasites by microscopic photography in the case reported by Dr. Lucas.

**Dr. Clarence L. Andrews**, chief of the Medical Service, presented the report of the Medical Service, commenting on each of the 32 deaths during his service period, and comparing autopsy records with ward diagnoses.

**Dr. Theodore Senseman** presented a case of "Spina Bifida" in an infant upon whom he had operated some weeks before. The progress of the baby and the site of operation were both highly satisfactory, and there were no signs of increased intracranial tension. The prognosis was indeed excellent.

#### Pine Rest Sanatorium

Harry Subin, M.D., Reporter

The regular monthly meeting of the Staff of the Pine Rest Sanatorium was held at the institution on Thursday evening, December 11. The



minutes of the previous meeting were read by the recording secretary, and accepted without correction.

The scientific portion of the meeting was opened by Dr. Fish, who demonstrated the method of outlining Kronig's Isthmus by palpation, percussion and auscultatory percussion. He pointed out that the narrowing of the field of resonance is due to limitation of movement of the diaphragm on that side.

The paper was opened for discussion by Dr. Hudson, who believed that Kronig's Isthmus is not narrowed until scar tissue forms, and is of no value as a sign in incipient phthisis.

Doubt as to reliability of the palpatory method of outlining the limits of Kronig's Isthmus was expressed by Drs. Kaighn and Allman.

Those present were Drs. Hudson, Kilduffe, Marcus, Allman, McGeehen, Fish, Pennington, Subin, Nickman and Mr. Conover.

## BERGEN COUNTY

C. H. Littwin, M.D., Reporter

The regular meeting of the Bergen County Medical Society was held at Englewood Hospital on the evening of December 9. Dr. Edward W. Clarke presided. In addition to about 60 members of the society there were a great many student nurses of the hospital present. The minutes of the last meeting and also of the Executive Committee meeting were read and approved.

A motion was regularly passed recommending that the physicians of the society charge a flat rate of \$6 for diphtheria immunization.

Dr. Huff reported for the Educational Committee, which consists of Drs. Wolowitz, chairman, Huff and Black, appointed in the interim since the last meeting. Rutgers College courses are again being offered, and after a quick survey the committee believes the most popular course to be in obstetrics and office gynecology.

The secretary mentioned a meeting of the State Compensation Committee in Newark to consider different phases of the compensation laws; Dr. G. W. Finke represented Bergen County.

The question concerning Dr. F. Haagen was presented to the society. The Executive Committee at one of its previous meetings requested an investigation of this man by the federal authorities. A week ago the announcement came out on the front page of the Bergen Evening Record that he admitted being a drug addict and would go away for treatment. Dr. A. Liva, President of the State Board of Medical Examiners, suggested that the society write a letter stating these facts, to serve as a complaint, so that the Board might hold a hearing on the revocation of his license. After some discussion Dr. Littwin's motion was passed that this matter be referred to the committee on Public Relations, for a report at the next meeting.

Then followed a long and excellent scientific program prepared by Dr. Littwin as follows:

Immunization of Measles with Convalescent Serum, Dr. George Heller, of Englewood.

Squint in Children, Dr. Raymond Meek, of New York.

The School Physician and the School Health Program, Dr. A. G. Ireland, of Trenton.

Pneumonia in Children, Dr. Charles H. Smith, of New York.

## CAMDEN COUNTY

Robert Gamon, M.D., Reporter

The regular monthly meeting of the Camden County Medical Society was held in the Camden City Dispensary Building, December 2, with Dr. E. G. Hummell, Vice-President, in the chair.

The society was honored by attendance of the President of the State Society, George N. J. Sommer, of Trenton, and Secretary J. B. Morrison. Dr. Sommer spoke briefly, emphasizing the importance of a strong Woman's Auxiliary and its relationship to the county society. He also emphasized the importance of our society taking part in the Post-Graduate Courses offered by Rutgers University and the Medical Society of New Jersey.

Dr. Morrison read a very timely paper on the much talked of subject of state medicine.

Both speakers were most cordially received.

The regular Scientific Program followed.

"Sinusitis", Earl S. Hallinger (by invitation.) Discussion opened by O. R. Kline.

"Status of Present Day Treatment of Pneumonia", T. K. Lewis. Discussion opened by E. B. Rogers.

"The Management of the Asthma Patient" Geo. P. Meyer.

Dr. D. F. Bentley, Jr., historian of the society, was given a rising vote of thanks for his contribution in the form of an "Historical Sketch of the Camden County Medical Society" and its members which is appended to the newly published Constitution and By-Laws of the Society.

Communication from the President of the Society, Dr. W. J. Barrett, indicated he would be present at the January meeting of the Society.

Dr. Wilmer Kruzen, Jr., Assistant Dean of Temple University Medical College, was a guest at the meeting, and by invitation discussed the papers of Drs. Hallinger and Lewis.

Dr. A. G. Kinney, 249 Woodlawn Terrace, Collingswood, N. J., was elected to active membership.

Drs. H. P. Coxon, of Stratford, N. J., and Samuel Rosen, 109 N. 27th Street, Camden, were proposed for membership.

A special committee was appointed by the president to consider advisability of the Camden County Society taking part in the annual Post-Graduate Courses.

The discussion and interest in the meeting was active.

## ESSEX COUNTY

Frank W. Pinneo, M.D., Secretary

The plans of our Maternal Welfare Commission are complete for the course in obstetrics. Here-with please find their announcement.

You are offered a special course of lectures, with manikin demonstrations, conducted by the teaching staff of Obstetrics and Gynecology of Columbia University and Sloane Hospital for Women. We believe this course offers an unusual opportunity in obstetrics for our members.

Tickets will be issued to those who subscribe, remitting \$10, for the course of 6 lectures, to be held at the Academy of Medicine, 91 Lincoln Park, Newark, 4.30 to 6 p. m., scheduled as follows:

Wednesday, January 14, Pre-natal Care and Management of First Stage, Dr. B. P. Watson.

Wednesday, January 21, Forceps Delivery, Dr. W. E. Caldwell.

Wednesday, January 28, Breech Delivery: Version, Dr. W. E. Studdiford.

Wednesday, February 4, Fetal Injuries and Neonatal Pathology, Dr. E. S. Coler.

Wednesday, February 11, Antepartum Hemorrhages, Dr. H. Halstead.

Wednesday, February 18, Pelvic Floor Injuries: Their Prevention and Repair. Management of Puerperium, Dr. C. E. Caverly.

#### Eye, Ear, Nose and Throat Section Academy of Medicine of Northern New Jersey

E. LeRoy Wood, M.D., Secretary

A very interesting meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey was held on Monday evening, November 10, under Chairman J. Wallace Hurff.

The paper of the evening was on "Detachments of the Retina and the Gonin Operation", read by Dr. Mark J. Schoenberg, of New York City. He related that up to advent of the Gonin operation nothing promising was known about detachments of the retina, while at the present time there is a definite favorable prospect in a number of cases. He estimated that of all cases of detachment of the retina, only 40% are suitable for operation, and of those operated on the results are good in 50% of the cases. The operation resulted from the fact that in the study of beginning detachments a hole or tear in the retina could often be seen, and the thought occurred that perhaps if that hole or tear could be closed with a cautery the process might be arrested. Local anesthetic is used, holocainbutyn, but never cocaine, because a clear cornea allowing fundus inspection is essential. An incision is made in the cornea at a point located over the retinal hole. Expose sclera, dry and clean sclera, stop oozing to avoid blood in the vitreous. Incise medially with Graefe knife, pass cherry-red cautery through incision, and through retina into vitreous. Then the cautery is withdrawn, catching the retina, pulling it out and anchoring it to the wound. The after-treatment is atropin, bandaging of both eyes, and bed for 8 days. Have the patient rest so that the operated area is in a dependent position and the vitreous lies upon it. Do not look at the eye for 6 days unless the patient has pain. Conjunctival sutures are removed the eighth day and a cathartic given; then diet for 8 days more. There is danger of hemorrhage from the sixth to ninth day; greatest when walking around.

Dr. Elbert S. Sherman reported the absorption of a large traumatic opacity of the lens. When he first saw the patient, a slender grass wire had perforated the eye 4 days previously and vision was only fingers at 1 foot. There was a large opacity in the posterior part of the lens cortex. One month later vision was 20/30 and the opacity thinner; 5½ months later the vision was 20/20 without correction and the opacity had completely disappeared and was not visible even through the slit lamp. Dr. Sherman said that small opacities may absorb but he had never seen such a large one disappear. He pointed out the lesson that one should not be hasty in giving an opinion as to the percentage of disability, until sufficient time has elapsed.

Dr. Wallace Pyle, of Jersey City, made a further report of a case he first presented in 1924.

The patient first seen by him in November, 1923, and then 4 months old, had a profuse discharge of pus from each eye and a false membrane on both lids which presented a diagnostic problem after diphtheria, gonorrhea and Vincent's angina were ruled out. Opinions of eminent consultants were secured and the diagnosis of the rare condition—"Recurrent Membranous Conjunctivitis"—finally agreed upon. In February 1926 the eyes were quiet, the lower lids free, with a marked growth from the upper lids. On November 1, 1930, neither eyeball was inflamed, there was no membrane and the lids looked like an old trachoma. There were marked polypoid, pedunculated growths from both upper lids, which appeared to be easily removable but surgical assistance was refused.

Dr. Linn Emerson, of Orange, reported seeing a patient with "Double Symmetric Ring-like Cataract with Clear Central and Outer Portions and Preservation of Good Vision".

Thirty-two members were present. The meeting adjourned at 10:50 p.m.

#### GLOUCESTER COUNTY

Henry B. Diverty, M.D., Reporter

A most interesting meeting of the Gloucester County Medical Society was held December 18 at the Oak Valley Country Club, near Woodbury Heights, entertained capably by Carterer McGarity. The following members were present: Drs. S. F. Ashcraft, of Mullica Hill; M. F. Lummis, of Pitman; James Hunter, Jr., R. K. Hollinshead, Edwin R. Ristine, of Westville; C. F. Fisler, of Clayton; E. E. Downs, J. Harris Underwood, Harry Nelson, C. A. Bowersox, of Woodbury; A. B. Black, of Mickleton; William and Charles Pebrick, of Glassboro; B. A. Livingood, of Swedesboro; O. R. Wood, of Paulsboro; H. W. Stout, of Wenonah and I. W. Knight, of Pitman. Guests were Dr. Masineo, of Philadelphia; Dr. James L. Gray, of Pitman; Professor Clovis, of Rutgers University; Dr. J. Claude Foster, of Westville, and Dr. Amos Underwood. Dr. Corson, of Bridgeton, and Dr. Church, of Salem County, were present as delegates.

The essayist of the evening was Professor John H. Gunther, M.D., D. D. S., assistant professor of anatomy at the University of Pennsylvania Dental School, and whose subject was "The Relation of Mouth Infections to the Manifestation of General Disease." This important subject was finely illustrated by lantern slides.

#### HUDSON COUNTY

Harry J. Perlberg, Secretary

The Hudson County Medical Society held its monthly meeting December 12 with Dr. J. M. Cassidy presiding.

The minutes of the last meeting were accepted as published in the bulletin.

The Board of Censors reported favorably upon the following applicants: Herman M. Jaffe, Conrad M. Bahnson, J. L. Mathesheimer, and Otto H. Mustermann, and all were elected.

Dr. Cassidy spoke of the passing away of Dr. J. H. Commorato, and requested that a large delegation of members attend the services as a last tribute of respect to his memory.

The following Committee on Post-Graduate Instruction was appointed by the president: L. C.



Lange, Chairman; Thos. White, R. L. Ballinger, George Gingsberg and A. E. Jaffin.

In reference to the Antidiphtheria Campaign, the president stated that he had a conference with Dr. Salmon, who had assured him of close cooperation between the Board of Health and the Hudson County Medical Society.

Dr. Cassidy stressed the laxity of members of the various committees and called upon them to fulfill their obligations.

A symposium on Genito-Urinary Disease was then held.

Dr. C. L. DeMerritt, whose subject was "Urethral Conditions in their Relation to Sexual Disturbances". Sex failure is defined as an involuntary failure to perform the sexual act. It is to be sharply defined from sterility, as the latter is a failure to discharge live spermatozoa, and in no way denotes importance. Among the causes of sterility are: (1) urethral causes, as after prostatectomy or with a tight stricture, where it is conceivable that the seminal discharge might become reflux into the bladder; (2) central nervous system lesions, with involvement of the nervi erigentes; (3) hypofunction of the testicular cells; (4) asthenia and debility; (5) psychic causes.

Dr. DeMerritt then proceeded to give a brief but adequate review of the anatomy of the male generative organs, with special reference to the urethra, and a description of the sex lesions of the urethra.

(1) Anterior urethral canal. (a) Malformations. Epispadias is so rare as to warrant no attention. Hypospadias—the opening is usually in the undersurface of the gland, and the lesion per se seldom if ever causes impotence or sterility. (b) Urethritis. In the acute stages, the condition causes impotence. In the chronic stages, the patient is potent and desirous of sexual intercourse long before being cured, unfortunately. (c) Stricture of itself causes no change, but when associated with urethritis, as is usual, impotence is the rule. (d) Chordee if sufficiently great may interfere with the sexual act and require surgical relief.

(2) Posterior urethral canal. Here is the usual site of trouble in impotence, and here the vast majority of causes are to be found in disease and dysfunction of the verumontanum or crest. Dr. DeMerritt here outlined the anatomy and known physiology of the crest. It is a highly glandular, non-erectile mound of tissue on the posterior aspect of the prostatic portion of the urethra, which changes slightly on erection. It is regarded by some as the trigger of the sexual gun, timing the moment of discharge.

#### DISEASES OF THE CREST

(1) The congested crest. Common causes are urethritis and coitus interruptus. Masturbation becomes of concern only where clerical cure has been attempted, with usual severe psychic results. The crest in this type is red, congested, bleeds easily and may have polypoid changes or excrescences. The complaint is usually early ejaculation, before or immediately upon intromission. It is especially common in middle-aged bachelors or widowers who are continent before remarrying. Treatment consists in the urethroscopic application of caustics, and gives excellent results. The procedure is to first clean up the field, apply carbolic to the entire crest; 5-10 treatments are given once or twice a week, with fine results. Carbolic is better than silver nitrate. While not so good for diagnosis, the open instrument is better than

the air or water distention instruments for treatment. In addition to local treatment, moderate exercise, especially walking, is prescribed, with attention to general hygienic measures.

(2) The anemic crest. With this type the outlook is poor. Local treatment gives poor results and attention to general hygienic measures seems to offer the best chance. It is probably true that the anemic crest does not follow the congested. Its etiology is indefinite.

Dr. E. J. Daly talked on "Injuries to the Urinary Tract Through Outside Violence". The urinary tract, except the urethra, although quite well protected by the bony skeleton and heavy musculature, is nevertheless subject to injury from outside forces, the result of falls, kicks, or squeezing, which produce contusions and lacerations; or pointed objects such as knives and bullets, which produce penetrating wounds. The damage done is not always in proportion to the force applied and may be limited to the urinary tract, or complicated by injury to other organs. Most cases we have seen have been of the contused and lacerated type. For convenience, we will divide our field into upper and lower urinary tract.

In the upper portion we have the kidneys, renal vessels, and upper ureters. Fortunately for the patient, and also for the surgeon, we usually find only one side involved. The kidney is injured by being forcibly thrown against the spine or ribs, or the blow being transmitted to it through the muscle wall. In penetrating wounds, the object passes directly into or through the kidney. The resulting trauma may vary from a slight subcapsular contusion to multiple lacerations or complete maceration of the organ. Where only a slight contusion is present, there is an oozing of blood which remains beneath the true capsule, but, if the capsule is torn, will spread out into the perinephritic tissue. The bleeding is usually slight, ceases spontaneously, and healing is accomplished by absorption, or formation of fibrous tissue. Where the injury is more severe and the parenchyma is lacerated, with considerable hemorrhage into the perinephritic fat, the same process of healing may take place; but it is in this type of case where secondary infection is prone to occur, either hematogenous or directly from the kidney or nearby bowel. Then we are confronted with a perinephritis which develops in the ensuing few weeks, or a destroyed kidney, the result of a diffuse pyelonephritis, which manifests itself some weeks or months later. If the injury extends into a calyx, it permits escape of urine and the above conditions develop more readily. Extravasation of blood and urine although somewhat limited by attachment of the peritoneum to the posterior abdominal wall, tends to burrow downward, and may extend into the true pelvis. If the peritoneum has been torn, it will enter the peritoneal cavity. These cases are serious, not always because of hemorrhage, but because of the devastating effect of the extravasated urine.

Injuries to the upper ureter occur with injuries to the kidney; the major portion is so well protected and fixed that it is rarely injured by external forces; penetrating objects have caused complete division and lacerations have resulted from falls.

Where the patient's condition is not too alarming there is much to be gained by expectant treatment, for when operation is indicated, nephrectomy is either necessary or seems the most rational procedure. I feel that a kidney that can be left in will be a better kidney if left undisturbed.

During the period of observation, shock is combated with heat, clysis and morphin. Pulse and temperature should be recorded at hourly intervals. Frequent palpation will reveal any increasing tumor or evidence of intraperitoneal irritation. These are all guides as to the necessity of surgical intervention. When operation is indicated, it is usually within 48 hours.

As to the future of these kidneys avoiding operation, many of them seem to go along without further trouble. Others develop a pyelonephritis, or hydronephrosis, and are prone to be the seat of calculus formation.

Lower tract. The bladder is more susceptible to injury if distended, because in the collapsed state or containing only a small amount of urine it is well protected by the bony pelvis, while, if distended, a portion of it is only protected by the less rigid abdominal wall, and is also more subject to a greater hydrostatic pressure. Injuries may be classified as contusions, lacerations and perforations. Lacerations and perforations may be either intraperitoneal or extraperitoneal, and both conditions are serious, one because of the escape of urine into the peritoneal cavity, and the other because of extravasation into the pelvic tissues, perineum, and abdominal wall. In our own cases, most of the bladder injuries have been extraperitoneal and associated with fracture of the pelvis; damage to the bladder being longitudinal tears or perforations by bone fragments.

Injuries of the bladder should be diagnosed and proper treatment instituted as quickly as possible. Here, we cannot carry out expectant treatment with the same degree of safety as in injury to the kidney. The symptoms of rupture or perforation of the bladder are: History of injury with sudden pain in the bladder region, blood in the urine, desire to urinate but inability to do so. Shock is present; more so in cases accompanying fracture of the pelvis. In the intraperitoneal type, seen early, palpation may not disclose any particular evidence. This is very important in intoxicated persons, with intraperitoneal rupture. When seen late there is evidence of peritonitis. In extraperitoneal rupture, there is rigidity, fullness and tenderness over the suprapubic region extending laterally and into the perineum. Catheterization as an aid to diagnosis is valuable, but dangerous, and is not infallible. It should be carried out under most careful asepsis and one should be prepared to follow with operation in a very short time, if such procedure is found necessary. The same may be said for cystoscopy.

The diagnosis having been made, operation should not be delayed. Where intraperitoneal rupture is suspected, the peritoneal cavity should be opened through a low midline incision. The wounds in the bladder, if jagged, should be trimmed, and closed with at least a double row of sutures. The escaped urine is mopped out, and the abdominal wound closed in layers. A large catheter is then passed through the urethra and anchored in place.

For extraperitoneal ruptures, the usual suprapubic approach is made, and the bladder exposed. Considerable bleeding is sometimes encountered, springing from torn pelvic bladder vessels. The rupture or perforation is usually found on the anterior aspect of the bladder, and frequently extends into the roof of the posterior urethra. The wound should be closed with a double layer of plain catgut, and the bladder drained through a suprapubic tube. The prevesical bleeding can be controlled by gauze pack-

ing. Where the posterior or bulbous urethra has been crushed, it is advisable, while the bladder is open, to do a retrograde catheterization, leaving the catheter in situ.

As to the care of a fractured pelvis, the application of casts or slings does not seem very practical. Osteomyelitis, invariably develops and sequestra of bone either work their way through the skin or are removed. Bone healing, although slow, is usually in the end quite satisfactory.

Urethra. The urethra may be injured by falls, crushing the bulbous or membranous portions against the pubic arch, cutting objects, gunshot or bullet wounds, or circular pressure applied to the penis. The most common cause is falling astride some firm object such as a rail or beam; this results in a contused laceration of the bulbous or membranous urethra. Gunshot wounds usually involve the rectum or bladder, and may carry away a considerable portion of the urethra. Cutting objects cause wounds ranging from lacerations of the urethra and corpus spongiosum to amputation of the penis. Circular pressure from rings, rubber bands and iron bolt nuts, cause interference with the circulation. The result depends on the length of time the constriction is present, and varies from a contusion to gangrene of the distal portion.

Treatment of wounds of the urethra consists of approximating the divided ends and diverting the urine from the wound. In the less severe cases this is readily accomplished by an indwelling catheter over which the ends of the urethra are approximated. When there is only slight injury an indwelling catheter may be the only treatment necessary. In cases of contused lacerations of the perineal urethra, external urethrotomy should be done. If the proximal end of the urethra cannot be located, a suprapubic cystostomy and retrograde catheterization is necessary.

*Dr. S. R. Woodruff.* "Radiographic Delineation of the Urinary Tract by Means of the Intravenous Injection of Uroselectan: A study of its Relative Value as Compared to Retrograde Urography".

Delineation of the urinary tract by utilizing the secretory power of the kidney through the intravenous injection of a substance that would be excreted in sufficient volume and be of sufficient radiographic value, has long been sought as the ultimate in urographic diagnosis. In 1923, the first attempt was made by Osborne, Sutherland Scholl and Rowntree who injected solutions of sodium iodide of various strengths. The results were not particularly noteworthy. There is at present considerable discussion as to priority in the application of the present uroselectan, and as practically all the preliminary work has been done in Europe, we do not feel that our knowledge of conditions allows us to criticize or extol in any particular direction. From our observations of such an important matter as this we would draw attention to the splendid work done by Professors von Lichtenberg and Binz and Drs. Rath and Swick. At the Post-Graduate we have been particularly fortunate in obtaining uroselectan through the courtesy of von Lichtenberg and this chapter is devoted solely to a consideration of our results.

Uroselectan is an organic iodine combination and its formula is still under observation and likely to change, so that its exact chemical composition makes little difference at this time. It is very soluble in water, neutral in reaction, and practically 90% will be excreted by the kidneys within 8 hours. Some of the historians say that it is non-toxic and that absolutely no reactions



follow its use. Our experience leads us to believe that this is not always true for we have noted urticaria, generalized erythema of the skin, and in 1 case, nystagmus, incoherence of speech, and temporary unconsciousness.

We view with considerable alarm the expectancy of the general surgeon and internist who believe that they will now be able to diagnose all genito-urinary diseases, particularly those of the kidney, without use of the cystoscope or urologist, and we feel that a crop of unfortunate surgical mistakes is about to be harvested. The value of intravenous pyelography is tremendous and unmistakable but its use should be limited to those with experience in evaluating the results obtained. Not the least of its value lies in the fact that it is practically a most excellent test of renal function, for in the normal kidney it is quite usually to be found in the renal pelvis if a roentgenogram is taken in 5 minutes after the injection, while in those kidneys diseased or altered in their functional capacity in any way, delay or positive non-appearance of the material is the result. Patients with moderate destruction of renal function in 1 kidney will show a corresponding lengthening of appearance time and insufficient filling of the renal pelvis. Where both kidneys are damaged, one might even hesitate in using the material unless it be desired to do so from a functional standpoint. Some of our cases were especially fitted for this type of diagnosis while others were done simply as a routine procedure. It is in some peculiar conditions found in urology that intravenous pyelography will be of its greatest value. Where one or more ureters have been transplanted and ureteral orifices are not available to catheterization we have no other diagnostic means. In children a fertile field will no doubt be found for this type of diagnostic procedure. In those cases where some physical, mental or anatomic condition makes cystoscopy either impossible or not advantageous, delineation by this type of procedure will be of immense value.

One of our chief criticisms has been that one has absolutely no control over the result after giving uroselectan. The radiographic exposure may or may not contain anything of a diagnostic value. Our principal objection is that the results are by no means uniform. One may go through the entire procedure of injecting uroselectan and the subsequent roentgenographic exposures, without obtaining anything of a diagnostic nature; that is, for the exact condition for which one might be using the substance. The non-secretion of the material naturally means a kidney which at that particular time is not functioning. In some cases, as of reflex anuria, this may be only temporary, while in other conditions of actual renal destruction, the exact type of pathology cannot be foretold, as such conditions may be present in any of the destructive changes taking place in the kidney. If the material comes through delayed and in small amounts, only a cursory knowledge of the pathology can be foretold, for the renal pelvis under these conditions will probably not be well delineated. If the material comes through in good quantity there is probably a normal kidney anyway; this latter knowledge at least being important many times.

Retrograde pyelography at the Post-Graduate has been particularly of value to us from a diagnostic and prognostic standpoint. While we feel that intravenous pyelography is one of the most outstanding procedures brought out in urology in a number of years, yet we cannot believe that

it will supplant cystoscopy nor retrograde ureteropyelography. This latter procedure we have found to be positive in 96% of its usage, and while we greet intravenous pyelography with open arms, we will probably still keep one hand on the cystoscope.

The dosage and method of administration of uroselectan has not yet been absolutely standardized. We have usually given 30 to 40 gm. dissolved in double distilled water in a volume of 120 c.c. The solution is filtered thoroughly and sterilized in a water bath or autoclave for half an hour. The dose for children is graduated, as in all medication. It is quite necessary that no rubber tubing come in contact with the material and therefore it must be given by the syringe method. If 30 gm. are given, the entire amount may be injected at once, while if 40 gm. are used it is better to inject one-half of the material and then wait for an interval of 5 minutes before repeating. This latter procedure probably brings out a better resultant shadow.

Investigating this work, we followed a set schedule: Taking the pulse, a sample of blood from the vein and a preliminary roentgenogram. During the injection of the material and for a few minutes afterward, the pulse was counted continually and its variations noted. The blood was used as a check-up against blood taken from the vein one-half hour after the injection, and the iodine content noted. Radiographic exposures were made at 5 minutes, 15 minutes, 30 minutes, 1½ hours, and 3 hours. We found quite usually the maximum intensity of radiographic result was at the 15 minute exposure, although this would naturally apply to normal kidneys. Not the least value of uroselectan is the fact that it intensifies the shadow of the kidney itself, thereby being of remarkable value in delineating its size and position. We were much chagrined to find it of no value in interpreting the shadow in 3 cases of ureteral stone. In none did the ureter fill and in 1 there was no shadow of the calculus at all. These 3 were later easily checked up by the ordinary cystoscopic and radiographic means.

The comparative poor filling of the renal pelvis and ureter, when considered in relation to that of a good ureteropyelogram will be sadly felt by the urologist.

#### Clinical Society North Hudson Hospital

J. Africano, M.D., Reporter

The regular monthly meeting of the Clinical Society was held Tuesday, December 9, with Dr. William Sweeney acting as chairman; 52 members and guests present. Dr. Tannert read the report for November: 246 admissions; 317 discharges; 15 deaths, of which 10 were surgical, 4 medical, and 1 new-born; 4 autopsies were performed; clinic cases 394, emergency cases 474, ambulance calls 99. Several of the deaths were briefly discussed.

The following case presentations were made by members of the Staff:

*Dr. Lawsing.* Interesting Case of Duodenal Ulcer. J. C., male, aged 28, admitted complaining of pain in the upper abdomen, gaseous eructations, slight loss of weight and headaches. Influenza and tonsillectomy 7 yr. previously. Gonorrheal urethritis in 1921. About 6 years ago the patient first noticed a mildly sharp pain in the epigastrium, which would come about ¾ hr. after meals, last 2 hr. and be relieved by eating.

A meat meal would make the pain worse. Some meals would not be followed by pain. He has had 3 recurrences of such attacks in the past 6 years. Two years ago when he had his second attack, radiographs were taken and he was told he had an ulcer. He responded to treatment and was free from pain until the present attack which, besides the pain, is accompanied by a gnawing sensation and a fullness in the upper abdomen. The pain comes 2 hr. after eating and is relieved by food and sod. bicarb. Abdomen soft; no masses; slight tenderness 2 in. above umbilicus in the midline and extending 2 in. to the right. Slight tenderness in both lower quadrants. X-ray. G-I series was reported as showing a normal pylorus and duodenum with no defects in the gastric outline. The 6 hr. plate showed no gastric retention; head of the meal was in the transverse colon and the tail in the coils of the terminal ileum.

The patient was put on a milk and cream diet with alkalis and this was gradually increased; a modified Sippy diet. He improved and was discharged. In this case we have a clinical diagnosis of duodenal ulcer which is not supported by the gastric analyses nor by the x-ray examination. Peptic ulcer is common; approximately 5% of all adults dying from various causes show open or healed peptic ulcer. Clinical history frequently shows that ulcer has been present for many years continuously or recurrent, but not recognized. The most conclusive evidence of unhealed peptic ulcer is derived from careful study of distress symptoms. In peptic ulcer 50% of cases show hyperchlorhydria; 40% are within normal limits; in less than 10% there is hypo-acidity. A combination of burning, fullness and pronounced hunger pain relieved by food or alkalis, occurring periodically and rhythmically, is almost conclusive of duodenal ulcer.

*Dr. Miller.* Unusual Fibroid Tumor of the Ovary. Mrs. A. C., aged 32, complained of a mass in lower abdomen. Appendectomy at age 17. Nulliparous. Menstruation regular, non-painful, moderate in amount, excepting for being scanty for the past 3 months. She had noticed a mass in the lower mid-abdomen, more toward the left, and assumed she was pregnant, and this was confirmed by a physician. When seen at my office the patient was in excellent health, having no complaints, desiring only prenatal care because of the fact that she felt fetal movements. No confirming examination was made outside of the routine measurements, blood pressure and urinalysis. She returned 2 months later, presenting herself with a generalized edema, which proved to be an anasarca. Bimanual examination revealed a globular mass in the midlower abdomen, corresponding to a 6 months' pregnancy. No fetal heart heard. Blood pressure and urinalysis normal. The lower extremities were about 3 times normal size, and abdominal cavity gave evidence of free fluid. There was no colostrum of the breasts, nor were there any other prevailing signs of pregnancy. Under diet and symptomatic treatment there was no recession of the generalized anasarca. The patient was prepared for laparotomy by removing 1500 c.c. fluid from the chest. The abdominal cavity was filled with several liters of straw-colored fluid, which was slowly aspirated, and a tumor weighing 7 lb. and measuring 20 cm. in diameter, on the left ovary, was found and removed. The patient made an uneventful recovery.

The pathologic report was fibroma with

myxomatous degeneration. The interesting feature is the unusual generalized anasarca accompanying this not uncommon type of tumor.

*Dr. Pearlstein* considered the feature of edema: This is supposed to be caused by a change in the movement of water of the tissues incident to disturbances of the electrolytes, as in inflammation; or it may be due to a lesion of the "water-regulator" center in the hypothalamus; or finally, it must be explained on the basis of an endocrine disturbance, as in cases of diabetes insipidus. In the case presented it could not be ascribed to congestive heart failure, the measurements of the heart being normal, nor to portal stasis from obstruction, nor to nephrosis; tuberculosis of the peritoneum, and malignancy were ruled out at the operation.

*Dr. D'Acerno* thought it likely that the tumor was a coincidence along with polyserositis.

*Dr. Tannert* disagreed, as the patient improved remarkably after the operation, but Dr. Schulman pointed out that in tuberculosis effusion due to Concato's disease even simple exploratory laparotomy often causes marked clinical improvement.

*Dr. Tatarjan.* Pyelitis Complicating Pregnancy. Pyelitis is the most frequent complication of pregnancy. It was first mentioned in 1841, by Pierre Rayer, with the statement that the pregnant uterus was the cause of inflammation of the ureters and kidney pelvis. After a silence of 50 years, Heblaut made some careful observations on the course of pyelitis in pregnancy. In the etiology, 2 component factors must be recognized: urinary infection, and urinary obstruction and stasis. Only where both obstruction and bacteriuria exists conjointly does an infection of the kidney pelvis take place.

M. M., aged 17, admitted to hospital June 14. Chief complaints were chills, fever, generalized aches, pain in the right loin, vomiting, constipation, cough and expectoration and loss of weight, and slight hemoptysis 1 week before. The provisional diagnosis was pulmonary miliary tuberculosis and pregnancy. The positive findings were a few bad teeth in the upper jaw, moist scattered râles on both sides of the chest; fundus uteri 1 cm. below the umbilicus; fetal movements felt, fetal heart sounds not audible. Urinalysis showed many pus cells, clumped; smear showed *B. coli*. Cystoscopic report was: trigone and post-urethra congested, both ureteral orifices small and congested. Pyelography of the right side showed dilated ureter, distorted, and enlarged pelvis and calyces.

On July 14, an indwelling catheter was introduced and on July 19 she gave birth to a live premature baby who expired in a few hours. After this the patient began to improve; temperature came down to normal and she was discharged as improved.

This was primarily a severe case of acute pyelitis of pregnancy, the physical findings of the chest misled us and prompt urologic examination and treatment were not instituted. We believe that introduction of indwelling ureteral catheters and continuous drainage and irrigation of the renal pelvis would favorably change the progress and outcome of the case. Many cases of pyelitis of pregnancy are recurrences of old childhood infections, therefore the pediatricians should not be satisfied with apparent cure of pyelitis in children, but urologic examination should be made before they are pronounced cured; for, in pyelitis, as in syphilis, the residue is appalling.

After the patient is discharged, a follow-up system should be instituted, as delivery does not



cure the urinary infection; postpartum pyeloureterograms demonstrate that distention of the kidney pelvis and ureters and obstructions have been found months, even years, after delivery.

*Dr. Hekimian* stated that failure to diagnose pyelitis may be due to neglect of a careful urinalysis or to the fact that few symptoms referable to the pelvis of the kidney become manifest; in using indwelling catheters, their size must be gradually increased in order to give continued drainage.

*Dr. Schulman* has noted that in most cases the pyelitis clears up after the patient gives birth, as shown by pyelograms.

*Dr. Luippold*, A Case of Congestive Heart Failure with Thyrotoxicosis. Patient, a housewife, aged 29, entered the hospital October 9 complaining of extreme dyspnea, orthopnea, restlessness, anxiety and agitation. She was made aware she had a heart disorder 11 yr. ago following an injury to the chest. No further trouble with her heart, however, until 6½ yr. ago when she became pregnant; in addition to her cardiac distress at this time, there developed a marked edema of the lower extremities. A spontaneous abortion occurred at 2 months and it was necessary to dilate and curette, for it was incomplete. There ensued a period of cardiac tranquility for 2½ yr., after which there was another pregnancy, this time carried to full term. During this period there was no edema, but her heart gave more trouble than ever before and it was necessary to take medicine to relieve the dyspnea. After delivery, which was normal except for some difficulty with a retained placenta and loss of much blood, the patient was invalided for months; in fact she never did recover former strength. Eight months after delivery, she had a "heart attack" lasting a few days, which was very similar to her present symptoms. Three months later she once more became pregnant; this terminated in a miscarriage at 6 months in January, 1928. Following this the patient was weaker than ever.

There was marked dyspnea, orthopnea, cyanosis, extreme restlessness, gasping for air, and a tense and anxious expression. Eyes prominent, moderate exophthalmos, but the other signs of exophthalmic goiter not in evidence; pupils constricted but equal, reacting normally. The neck showed visible pulsations on either side and disclosed a systolic, carotid thrill and murmur on the right side, with right jugular dilated and engorged. There was no thyroid enlargement. The chest showed a wildly tumultuous apex beat and heart action—visible beating over the entire chest. The tachycardia was extreme—160-200. No murmurs could be made out. Systolic sound weak, diastolic accentuated and snappy. Pulse scarcely perceptible. Lungs normal. The abdomen was not enlarged, but the liver was palpable to about 3 finger-breadths below the R. C. M. and disclosed pulsations. There was slight edema about the ankles and hands.

Laboratory findings: Blood count and urinalysis showed nothing abnormal. Wassermann negative. Icteric index 30. Van der Berg immediate direct reaction—moderate. Basal metabolism—+48.

Patient was given morph. sulph. and powdered digitalis leaf; initial dose of the digitalis was 9 gr. Within 4 hr. the pulse became more distinct and slowed down to about 90. Next day the patient was in great distress with nausea and vomiting and a choking tightness in the chest, but the heart rate had come down to 72, and pulse was of good quality but irregular, with premature

contractions. A systolic murmur was now easily heard; most marked at the apex. The excellent response to treatment was also evidenced by a urinary output of 103 oz. during the first 24 hr. Because of the pronounced susceptibility to digitalis, its dosage was cut at first to 3, then 2 gr. per day, and this seemed to be all that was necessary as a maintenance dose during the rest of the hospitalization. The response to morphin was also excessive, as shown by the undue somnolence. Patient gradually rallied in strength and about 3 weeks after admission she was allowed out of bed and limited exercise, and was content and insisted upon going home.

Adopting the classification of the American Heart Association, this case was diagnosed as: (a) Etiologically, probably rheumatic but superimposed upon which there is undoubtedly a thyrotoxicosis. There is here probably a long standing chronic exophthalmic goiter so mild that it is not recognizable, in which there are acute exacerbations, induced by pregnancies and other severe strains. (b) Anatomically: Enlarged heart with a mitral and tricuspid insufficiency. (c) Physiologic: Normal sinus rhythm with a systolic murmur most marked at apex. (d) Functional: Class 2-B, that is, a patient having organic heart disease, unable to carry on in less than ordinary activity without discomfort.

*Dr. S. Africano*, Diabetic Coma Complicated by Acute Suppurative Nephritis. Mrs. L. T. Swiss, aged 52, occupation mender, admitted on November 25, at 11 a. m. in coma and died at 11.14 p. m. same day. Five years ago the patient was told she had diabetes. Was never in coma before. She had polyuria, polydipsia and headaches. Patient was gradually becoming drowsy since noon of November 24; by midnight she was unable to answer when called and lapsed into coma; in coma approximately 13 hr. before receiving treatment. She had been given 25 units of insulin by a physician ½ hr. before admission.

Autopsy findings: Both kidneys of average size and on section the surfaces presented many nodular protrusions which upon stripping the capsule were found to contain purulent material. On section both cortices and medulla presented frequent scattered areas of hemorrhages and purulent exudate. The pelvis of the kidneys injected but not enlarged. Sections showed marked degenerative changes of both tubules and glomeruli with localizations of columnar cells in abscess formation. Section of the pancreas showed fatty infiltration and here and there fibrosis of the islands of Langerhans.

In this case we have 2 reasons for the failure of insulin. One is that the patient was in coma for several hours before receiving treatment. The other is the complication of suppurative nephritis, which undoubtedly was the main factor. It is well known that any infection in a diabetic is a serious matter. It frequently precipitates the coma even in mild cases, and is particularly dangerous in a neglected or undiagnosed case. The infection lowers the tolerance of a diabetic patient for glucose.

Among the serious complications which may produce fatal coma are hypertension, arteriosclerosis, nephritis, gangrene, septicemia, furunculosis and tuberculosis.

*Dr. Dalven*, Study of 3 Cases of Nephritis.

*Dr. Dalven* discussed at length the various classifications of nephritis, their symptoms and signs, and the laboratory findings, and reported 3 case histories.

## JERSEY CITY MEDICAL CENTER

Joseph Binder, M.D., Secretary

The regular monthly meeting of the Medical Staff of the Medical Center of Jersey City was held on Thursday evening, December 11, at 8:45 p. m., in the Out-Patient Department. Dr. Charles B. Kelly, presiding.

*Present:* Drs. O'Hanlon, Kelly, Binder, Burke, Jaffin, Houghton, Harter, Sprague, Winter, Friele, Hall, Schneekendorf, B. Kelly, Rundlett, De Fuccio, White, Siegler, Fineberg, Brophy, Perkel, Faison, Street, Cohen, Sullivan, J. Connell, Christian, Yachnin, Hasking, Daly, Residents and Interns.

Motion made and seconded that all rise and stand in silent prayer for one minute in respect to our departed colleague, Dr. J. R. Commorato.

The Commorato Memorial Committee read its report, which was accepted and ordered be spread in full upon the minutes. (See Obituaries)

## SCIENTIFIC SESSION

*Dr. Jaffin.* Abdominal Angina. Tissier, of Lyons, France, in 1924, noted intestinal symptoms due to peri-aortitis. These symptoms were colicky pains, associated with diarrhea or constipation. Others noted that this pain was increased on exertion or after eating. These symptoms very frequently simulate those seen in the surgical abdomen, and patients are therefore not infrequently operated upon for gall-stones, with nothing being found at operation. One must always bear in mind that abdominal pain in the old may have a medical basis, i. e. anginal in character. The general regimen in these cases is to instruct patients they are to avoid any physical exertion, and not to over-eat. To prevent or relieve anginal pain, nov-atropin has been used, and has served to relieve the arterial spasm during attack.

*Drs. White and Macchi* presented a case of Chronic Intestinal Obstruction for further diagnosis. The points of interest here were dilatation of the stomach, and visible peristalsis.

*Dr. Perkel* studied the radiograph of the G. I. tract and stated that he felt that there was a chronic partial obstruction about the duodenum, and also a spastic rectum.

*Dr. Jaffin* felt that this case should receive further medical study because this might be a functional condition.

*Dr. Burke* stated that this patient gave him a definite ulcer history, and he believes that the obstruction is due to an organic lesion, i. e. ulcer. The marked loss in weight, down to 93 lb., is important. This patient also presents a spinal deformity, and gives history of previous laparotomy for adhesions following a cesarian section a few years ago.

*Dr. Burke and Dr. Shanik.* Acute Pancreatitis. E. W., white, male, 42, foreman, admitted August 2. About 3 hr. before admission, patient was seized with severe sharp colicky pain in R.V.Q., well localized, non-radiating, accompanied by nausea and forced vomiting. Pain had persisted since onset without any relief. Previous attacks for past 10 years, at intervals of 6 months to a year, but never as severe or of such persistency. During the interval between attacks, patient was entirely free of pain. No G. I. disturbances, no epigastric discomfort, no eructations or flatulence, bowels regular. Abdomen scaphoid, no palpable masses; rigidity of upper right rectus muscle with marked tenderness on superficial pressure; spasticity and rebound tenderness present. Provisional diagnosis was perforated peptic ulcer; cholelithiasis with cholecystitis.

Operation disclosed a good number of stones, black in color and varying from the size of a grain of hemp seed to that of a cherry stone; a stone of small cherry size impacted in the cystic duct. The glands about the common duct were as large as hazel nuts. The serous covering of the gall-bladder was not much changed in appearance, but the mucosa was greatly swollen and extremely friable. Nine days later, both drains removed. Dakin tube inserted, shortened 2 days later, and finally removed in 6 days. Patient had uneventful course and was discharged after 20 days.

Patient readmitted after 3 months. Began to be troubled with a dull pain in the epigastrium, 4 days before admission, and had been getting progressively worse until now it felt like the "pressure of a foot in the abdomen"; pain constant, radiating to the back, not to the shoulders, associated with vomiting; had vomited 4-5 times before admission.

Provisional diagnosis of acute pancreatitis. At this operation found dense adhesions between the liver and the parietal peritoneum, fibrinous adhesions between the liver, stomach and duodenum. There was a greenish edema about bile-ducts and duodenum, and a similar edema at the base of the membrane over the pancreas. Adhesions between stomach and duodenum divided by sharp dissection—adhesions about duodenum separated with finger. Edematous tissue about head of pancreas opened bluntly and 1 rubber tube drain placed to lateral side of duodenum. Gastrocolic membrane opened and edematous tissue over pancreas broken open.

Patient relieved, feels fine; 12 days postoperative. Slight spasticity of lower abdomen with exquisite tenderness on slightest pressure over abdomen, especially on lower quadrant. Tympanitic, no demonstrable fluid.

Operation—Dr. Burke. Fibrin deposits over viscera in R. L. Q. Perforation closed by 2 layers Lembert sutures, and a curtain of omentum was stitched over the repair for additional security because of friability of the tissues. Two rubber tube drains inserted, one in pelvis and one in ileo-cecal region. Patient on strict regimen. Temperature dropped to normal the following day, and has remained normal since. Pulse 100.

*Dr. Doran* gave a brief résumé of 6 cases of Acute Pancreatitis.

There were 2 females and 4 males; 3 deaths, 2 females and 1 male. Two gave gall-bladder history; 2 no gall-bladder history; 2 had gall-bladder removed previously. In 1 case findings showed a bloody fluid; 2 had turbid fluid free in abdomen; 3 had fluid, bile-stained, localized about the pancreas. There were 2 autopsies; 1 showing a large hemorrhage in head of pancreas, and 1 necrosis of the tail of the pancreas.

*Dr. De Fuccio* showed the pathologic specimen from a child of 6 months, who died with history of persistent cyanosis without physical signs. Pathology of heart showed persistent, patent foramen ovale.

*Drs. Burke and Perkel* presented a case of Gastrojejunal Ulcer.

Male, 22 years old, chronic drinker, admitted 2 years ago with duodenal perforation after beer drinking fest. Operation at that time was anterior gastro-enterostomy. Patient did well until May 1930, when he experienced sharp sudden pain. Admitted to ward, treated medically, and discharged improved. Readmitted July 17 and again treated medically. Finally, patient was admitted to surgical service. Radiograph by Dr. Perkel showed a marginal ulcer at site of original gastro-enteros-



omy. Operation by Dr. Burke. Gastro-enterostomy unhitched and closed, ulcer sutured and reinforced with piece of omentum. The enterostomy portion of the tube was closed and dropped back into abdomen. Thus far patient doing nicely.

A lively discussion ensued on this case as to the type of original operation.

Meeting adjourned at 11.30 p. m. to collation in hospital dining room.

## MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Medical Society held its annual meeting in the Carteret Club on December 10, Dr. J. S. Vanneman presiding.

The minutes of October and November meetings were read and approved, after which Mr. Woodruff, of Rutgers University Extension Course was granted the privilege of the floor, and announced the continuation, under previous arrangements, of the Post-Graduate Lectures.

The Treasurer submitted his yearly report, which, after being audited by the Committee, Drs. Connelly, Yazujian and Weisler, was certified as correct, and the Treasurer highly commended for his efficiency, sagacity and judicious management of the finances of the society.

Motion was carried that on and after December 10, 1930, all applicants elected to membership, shall be elected as associate members, and at the expiration of 1 year they may become eligible to active membership.

Drs. Applestein, Cohen, Haney, McGuigan and Blanton were regularly elected.

The following applications were read and will take the usual course: Drs. Harry R. Aronis, Herman Cohen, Morton Reese-Cohen, Thomas V. Murto, Joseph Ragany and Peter J. Warter.

The request of Dr. G. M. Frank for transfer to Essex County was granted.

The following officers were elected: President, Nathan Swern; Vice-President, Wm. L. Wilbur; Treasurer, H. R. North; Secretary-Reporter, A. D. Hutchinson; Board of Censors, Wm. G. Schaufler; Member of Nominating Committee, James J. McGuire; alternate, H. R. North.

Delegates: J. S. Vanneman, H. R. North, A. D. Hutchinson, E. D. Lavine, Nathan Swern, H. D. Bellis, W. E. D'Arcy; Alternates, C. R. Sista, N. B. Oliphant, J. M. Schildkraut.

A communication from the Executive Secretary relative to the Merchantile Finance Corporation of New Jersey was received and filed.

A communication from Health Officer Dr. Alton S. Fell, with reference to Infant Mortality in the City of Trenton, was read and following discussion, the President appointed the following committee to confer with the Health Officer on this vital subject: Drs. J. J. McGuire, H. M. Rowan, A. W. Atkinson, Wm. J. Harman, Wm. R. Little and L. L. Friedmann.

The President, Dr. Swern, appointed Drs. Sica, Scammell and J. H. McCullough, Sr., to draw resolutions relative to the Compensation Bureau.

Following a very thorough discussion of Senate Bills 304 and 262, by Dr. McGuire, the Society voted to go on record as opposed to these bills,

and that the Senator and Assembly Representatives from this District be so notified.

The President appointed Drs. Scammell, Mitchell, Wilbur, Purcell and Vanneman as a Legislative Committee to act in conjunction with the State Welfare Committee on Legislation.

## MIDDLESEX COUNTY

William C. Wilentz, M.D., Reporter

The Annual Meeting of the Middlesex County Medical Society was held on Wednesday night, December 17, at Pfaff's Restaurant, Metuchen, with an excellent attendance.

The membership committee reported favorably on the application of Dr. Smith, of New Brunswick. On motion of Dr. McKiernan, seconded by Dr. Spencer, this application was passed by the society.

Dr. Johnson read the Treasurer's Report for the year and showed our society in very good financial condition. He stated, however, that there were several members who were not paid up in their dues and warned them that they would be dropped from the roll if the matter was not taken care of immediately.

A motion was made and seconded that the society pay for the expenses of this dinner and the entertainment. The motion was passed.

The application of Drs. Toy, of Milltown, and Fishkoff, of Perth Amboy, were read and referred to the Membership Committee.

A communication was read from the Red Cross asking the society to purchase a Health Bond and in that way give a donation. On vote, the society decided not to buy the bond.

A motion was passed to the effect that the Program Committee investigate the feasibility of holding all of the county meetings in one place, and of having the meetings in the evening, as well as combining social events with the meeting.

The Nominating Committee forwarded the names of the following as officers and delegates: President, William McCormick, Perth Amboy; Vice-President, Robert McKiernan, New Brunswick; Secretary, Samuel Berkow, Perth Amboy; Treasurer, Frank C. Johnson, New Brunswick. Delegates: Joseph Mark, Woodbridge; Frank C. Johnson, New Brunswick. Nominating Delegate: F. C. Johnson; Alternate, J. Mark.

Dr. Brown, the retiring President, gave a short talk in which he thanked all the members for their support during the year and also thanked the officers for their great assistance in making the past year a very successful one.

Dr. McCormick then occupied the chair and asked Dr. J. V. Smith to introduce Dr. Grattan who was the speaker of the evening.

Dr. Grattan, who is Chief Consultant Plastic Surgeon to the Allied Hospitals in New York City, delivered a splendid and most interesting talk on treatment of old scars and deformities of the nose. His talk was illustrated by lantern slides.

The society gave Dr. Grattan a rising vote of thanks for his most interesting talk.

Professional entertainment and a delicious supper were catered to the society.

**Medical Section Rutgers Club**

J. H. Rowland, M.D., Secretary

The regular monthly meeting of the Medical Section of the Rutgers Club was held on Friday evening, December 19, at the Elks' Club, New Brunswick, Dr. Klein presiding. There were 30 members, friends and guests present.

There being no business to transact, the speaker of the evening was immediately introduced. Dr. Harry Koster, of Brooklyn, spoke on "Spinal Anesthesia". Dr. Koster emphasized contraindications for spinal anesthesia, which are: cerebellar tumor, infection along the site of spinal injection, and types of fractures of the skull with pressure symptoms. He mentioned many reasons why spinal anesthesia was of choice in any operation and spoke of the more complete and normal relaxation, lessening of complications, and safety of its use with particular relation to paralysis of the respiratory center. Dr. Koster, who is very enthusiastic about the use of spinal anesthesia, bases his opinion on experience in 7000 cases. Spinal anesthesia was illustrated, together with various types of operations, by moving pictures.

After the meeting the members adjourned to the dining room, where they were entertained by the hosts of the evening—Doctors Gruessner, Gutmann, Haight and Haywood.

**MONMOUTH COUNTY**

William Von Oehsen, M.D., Reporter

The annual meeting of the Monmouth County Medical Society was held at the Country Inn, Freehold, December 9, with the President, Dr. James A. Fisher, in the chair. Minutes of the previous meeting were read and accepted with minor corrections.

The applications of Drs. Douglas, Haines and Levine were presented and on motion of Dr. O. K. Parry, seconded by Dr. W. W. Beveridge, it was voted that these applications would have to take the course as laid down in the new state by-laws; that is, that the secretary must write to the Biographical Department of the American Medical Society for any material they may have relating to the applicants.

The application of Dr. Millard B. Ervin, of Matawan, for permission to join the Middlesex County Medical Society was granted.

On motion of Dr. J. C. Clayton, seconded by Dr. Brown, it was voted that the secretary be empowered to have copies printed of the "Code of Ethics" and a fee schedule, to be sent to all present members and to all new applicants.

The resignation of Dr. H. B. Slocum, as of June 1, 1930, as a Delegate to the State Society was read and on motion of Dr. W. K. Campbell, seconded by Dr. Warner, it was voted to accept this resignation and that Dr. W. G. Herrman be appointed in his place, the appointment to be enacted as of the date of Dr. Slocum's resignation.

The Nominating Committee reported as follows: President, William K. Campbell, Long Branch; Vice-President, Stanley Nichols, Long Branch; Secretary, Daniel F. Featherston, Asbury Park; Treasurer, Robert E. Watkins, Belmar; Reporter, William Von Oehsen, Bradley Beach; Board of Censors, John C. Clayton, Free-

hold; Samuel Hausman, Red Bank; and William G. Herrman, Asbury Park.

Delegate to State Society for 3 years, W. G. Herrman, Asbury Park; Alternate, J. C. Clayton.

Dr. W. G. Herrman was also designated as member of the Nominating Committee from Monmouth County.

The Secretary was instructed to cast one ballot for election of the entire ticket.

Drs. Warner, Bryan and Beveridge spoke at length on objections to the Abell Committee Report, and Senate Bill 304, and on motion of Dr. James A. Fisher, seconded by Dr. W. H. Fairbanks, the secretary was ordered to write to the State Senator, Assemblymen and others, stating their objections.

Dr. W. K. Campbell appointed as an Educational Committee to act on the Post-Graduate Course of Instruction, arranged by the State Medical Society and Rutgers University, Altschul, Prout, and Featherston.

The treasurer reported for the year of 1930, as follows:

Bank Balance from previous year	....	\$ 213.14
Total received in dues for 1930	.....	1630.00
Total funds	.....	\$1843.14
Expenditures for 1930	.....	1706.34
Balance on deposit Dec. 9, 1930	.....	\$ 136.80

A turkey dinner was served to the 35 members present.

**MORRIS COUNTY**

Marcus A. Curry, M.D., Reporter

A regular quarterly meeting of the Morris County Medical Society was held the evening of December 18, in the recreation hall of the cafeteria building at the New Jersey State Hospital at Greystone Park; the society enjoying the privilege extended by the Board of Managers and Chief Executive Officer Dr. Curry. President Sutphen presided over a gathering of more than 60, including members of the Summit Medical Society, also Dr. VanBuren, of New York, and various newer members of the medical staff of the institution.

Routine business included the reading and approval of minutes of the annual meeting in September, a special meeting in November, the proceedings of meetings of the executive committee; a floral tribute to late member Noble H. Adsit, of Succasunna, who passed away November 22, and the appointment of a committee on memorial resolutions; also conferences with the county Board of Chosen Freeholders in reference to the coroner situation and indicating their willingness to cooperate with the society.

The resignation of Percy L. Smith, now practicing in Utica, New York, was received, and the secretary also reported Dr. Weisenhoffer, recently resigned, of Schenectady, New York, now eligible for membership in that county society.

Dr. J. Henry Harrington, of Rockaway, was proposed for membership; this being duly referred to the credentials committee.

Dr. Young reported having audited the Treasurer's books and found them correct. Dr. Sher-



man, for the Committee on Public Relations, reported progress. Dr. Lathrope reported that the Committee on Revision of Constitution and By-Laws had completed the work, a copy of the adopted revision being in the hands of the members, and suggested that the committee be now discharged.

The event of the evening was a paper by Dr. William Barclay Parsons, of the Presbyterian Hospital Medical Center, New York, the topic being "Indications for Surgery in Diseases of the Thyroid". Dr. Parsons presented his subject in a manner that immediately invited and held the interest of his audience. The introductory was that in the treatment of the various diseases of the thyroid gland, various methods are in use; involving doing nothing, the use of iodine, glandular extract, radiotherapy, and operation; surgery probably has the wider application than any other single form of treatment, being called upon in the infections, tumors, and some of the disturbances in physiologic function. Dr. Parsons covered in an able and detailed way, infections, neoplasms, adenomas, and indicated surgery to drain an abscess of the thyroid gland; to remove localized tuberculosis; to relieve pressure from an adenoma or Reidel's struma; in carcinoma and other malignancies; in adenoma without hyperthyroidism, to improve the appearance, to aid or prevent pressure, and to avoid the development of hyperthyroidism and carcinoma; also in cases with hyperthyroidism as a method with a high percentage of cure and a low element of risk, particularly as a safeguard before cardiac damage has occurred, or in the presence of cardiac damage, to effect improvement in symptoms and interrupt the vicious cycle.

The paper was enthusiastically received and the discussion was extensive; those taking part being Drs. VanBuren, Curry, Larson, Pickney, Frost, Glazebrook, Lathrope, McMahon, Rice, Ward, Tiedeback, Collins, Young, Rubin, Thomas, Emory and Abell.

## PASSAIC COUNTY

Wayne W. Hall, M.D., Reporter

The December meeting of the Passaic County Medical Society was held at the Health Center, Paterson, December 10, at 8.30 p. m., Dr. Joseph Morrill presiding, with 70 members present. The minutes of the November meeting were approved as read.

The Censors' report approved the applications of the following doctors: S. Rosa Frank, 365 Park Ave., Paterson, and Jacob Warren 666 Broadway, Paterson. The following applications were received and referred to the Board of Censors for investigation: Morris S. Joelson, 122 Paterson St., Paterson, and F. R. Palmer, 27 Monroe St., Passaic.

Bills S. 262 and 304, proposing to place all Boards of Examiners under control of the State Board of Education, was discussed. As the passing of this law would require the turning over of all monies to the State Treasury, the State Medical Society should oppose it because of the loss of funds with which to combat illegal practice. It was moved and seconded that a letter protesting this be sent to our legislators.

Prof. John H. Stokes, head of the Department of Syphilology and Dermatology at the University of Pennsylvania Medical School, and formerly

connected with the Mayo Clinic in a similar capacity, and author of "Modern Clinical Syphilology", one of the best written authoritative texts in the English language, spoke on "Preventing the Transmission of Syphilis by Control of Infectiousness".

Dr. H. H. Lucas, of Paterson, reported on the establishment of a Psychiatric Clinic in the General Hospital.

After much interesting discussion of these highly appreciated papers the meeting adjourned.

## UNION COUNTY

### Westfield Medical Society

Frederick Adrian Kinck, M.D., Reporter

The December meeting of this society was held at the home of Dr. George S. Laird on December 9. A full representation of members was present. As President Salvate was ill, Vice-President Lowell presided.

After the regular routine business, Dr. Louis G. Newman read a very interesting paper on "Heart Lesions".

The discussion was very spirited as to how much should be told the patient, whether he could take better care of himself and cooperate with his physician, or whether he would be so frightened his condition would become much worse.

Refreshments were served and the meeting adjourned after a vote of thanks to Dr. and Mrs. Laird for their hospitality.

## Obituaries

HEDGES, Benjamin Van Doren, of Plainfield, died at his home November 2, 1930, after an illness of 2 weeks' duration. Dr. Hedges was 65 years of age and had been suffering from a cardiac affection for several years. He was born in Trenton, the son of Joseph E. Hedges and his wife Ann Elizabeth Van Doren. He was graduated from Princeton University in 1888 and from the College of Physicians and Surgeons of New York in 1892, and began his practice here in 1894. He was a member of the American College of Surgeons, American Medical Association, New Jersey State Medical Society, consulting surgeon of Muhlenberg Hospital, Plainfield, and Bonnie Burns Sanatorium, of Union County; former president of the Society of Surgeons of New Jersey, the New Jersey State Sanitary Association, the New Jersey State Pediatric Society, the Plainfield Board of Health, former member for 17 years of the Plainfield Board of Education and former member of the Plainfield Public Library Board.

Resolutions of the Union County Medical Society:

In the passing of Dr. Benjamin Van Doren Hedges, the Union County Medical Society has lost a loyal and valuable member.

For a quarter of a century he has been one of the outstanding members of this society.

His scientific contributions were always of the highest order and he stood for the highest ideals in medicine.

Therefore, be it resolved: that our sincere sympathy be extended to his bereaved family, and that the society attend his obsequies.

Be it further resolved, that these resolutions be spread upon the minutes of the society, that a copy be sent to his family and to the press.

Signed:

Norton L. Wilson  
Harry V. Hubbard  
Watson B. Morris

COMMORATO, John, of Jersey City, the personal physician to Mayor Frank Hague, and a member of the Staff of Jersey City Hospital and of St. Francis' Hospital, died in the last named institution on November 30, at the age of 45 years.

#### Resolutions on Death of Dr. Commorato

At a special meeting of the Director and Medical Staff of the Medical Center of Jersey City, held December 2, 1930, the following resolutions were unanimously adopted:

Whereas, in memory of the loss suffered by the death of our associate, John R. Commorato, M.D., we recognize again the uncertainty of human affairs and desiring to express our appreciation of the faithful and able manner in which he has attended the sick as Visiting Physician during the many years he has been connected with our institution; be it

Resolved, that in the death of Dr. John R. Commorato the Medical Center of Jersey City mourns the loss of skilfull and conscientious colleague.

Desiring to convey to his family this testimony of our regard and appreciation, it is directed that a copy of these proceedings be sent to them and also that they be entered in full on the records, as a perpetual Memorial of the love and esteem in which he was held by the Director and Medical Staff.

Committee: Drs. Rundlett, DeFuccio  
and Von der Leith.

McCORMICK, Daniel L., of 9 Tichenor Street, Newark, was killed in an automobile accident on the highway between Trenton and Princeton, November 27, as he was returning home from a Thanksgiving Day family reunion.

Dr. McCormick was born in Elizabeth in 1874, the son of the late Judge Thomas F. and Elizabeth McCormick. He was educated in Seton Hall College, and was graduated by the College of Physicians and Surgeons in New York about 35 years ago.

He practiced medicine in Jersey City 6 years and 28 years ago came to Newark and opened an office in Mulberry Street. Later he moved to West Kinney Street and for the last 15 years his home and office have been at 9 Tichenor Street.

Dr. McCormick was appointed a member of the Newark Board of Health by the late Mayor Raymond when he took office January 1, 1915, and was reappointed 2 years later. He was one of the Mayor's physicians and also was the physician of The Newark Evening News for its employees.

During Dr. McCormick's service on the Board of Health, between January 1915, and November 1917, he was chairman of the sanitary committee.

Dr. McCormick was a member of the Academy of Medicine, Essex County Medical Society, the

Medical Society of New Jersey and the American Medical Association.

#### Resolution of Camden County Medical Society on the Death of Dr. Dowling Benjamin

"Whereas: Dr. Dowling Benjamin who has honored the Medical Profession with unswerving allegiance to its high ideals, and with tireless efforts for the afflicted under his care, as well as with citizenship that was unselfish and thoughtful, has been called from this earthly life; therefore be it Resolved that we, his fellow practitioners in Camden do hereby give expression of sorrow in his passing.

The notable career of Dr. Benjamin is worthy of our sincere commendation; and a few of the 'High Spots' or activities may be properly referred to herein.

As an original member of the Cooper Hospital Staff, he is credited with the first introduction of surgical asepsis in said institution.

In 1882 he was responsible for the rejuvenation of the Camden City Medical Society, which fact led to the many years of prolific charity through the present Camden City Dispensary; as well as furnished the medical profession with a permanent hall for our meetings. He was a prominent factor in obtaining an artesian water supply for Camden which literally stamped out typhoid fever.

His personal influence with Mr. Andrew Carnegie was responsible for the erection of the Main Library of our city.

He was a prolific writer; also a Lecturer in the Medico-Chirurgical College of Philadelphia; and was very conspicuous as a medical expert in our local Courts, as well as the Philadelphia Courts, and by local practitioners he was considered to be the best read man in our professional circle.

Be it further Resolved: That a copy of these resolutions shall be entered upon the minutes of this society, and a copy of the same be forwarded to the family of our deceased member.

Signed,

H. F. Palm, M.D.  
A. Haines Lippincott, M.D.  
Alexander MacAlister, M.D."

MORSE, George Vane, of 70 Watsessing Avenue, Bloomfield, died December 12 at the Homeopathic Hospital, East Orange, after an illness of a month. He was 42 years old and had practiced medicine in Bloomfield 15 years.

Dr. Morse began his practice in Bloomfield after graduation from the University of Michigan and the New York Homeopathic Medical College and Hospital. He served during the World War in the Medical Corps of the American Expeditionary Forces in France. Upon his return he specialized in surgery.

As a surgeon he became well known in Essex County. He was a member of the Essex County Medical Society, the New Jersey State Medical Society and the American Medical Association, and was a former president of the Associated Physicians of Montclair and vicinity.

He served on the senior surgical staff of the Homeopathic Hospital, in the out-patient department of the Mountinside Hospital, as consulting obstetrician to the Community Hospital, Montclair, and as an honorary member of the staff at St. Vincent's Hospital, Montclair.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 2 ORANGE, N. J., FEBRUARY, 1930

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## RECURRING POSTOPERATIVE PAROTITIS

HAROLD S. DAVIDSON, M.D.,  
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Atlantic City, N. J.

Parotitis as a postoperative complication is not unusual but its occurrence twice in the same patient after 2 clean abdominal operations is unusual enough to warrant a report. The patient was operated upon by cesarean section for contracted pelvis 5 years previous to the second operation. Immediately after the first operation left parotitis developed, and went on to suppuration, necessitating incision and drainage. She was so extremely ill that her surgeon advised her not to conceive again, but 5 years later she consulted me because she had missed a menstrual period and feared she was pregnant. Examination confirmed her suspicion. Acting upon the advice of her surgeon, she was referred to Dr. D. B. Allman, at the Atlantic City Hospital, who, under gas and ether anesthesia, performed a therapeutic abortion, removed a right cystic ovary, tied off both fallopian tubes and removed a normal-looking appendix. The patient reacted very well from the operation, having but little discomfort, taking liquids and being free of fever. During the night of the second day after operation she developed a chill, fever of 103° F., and pain and swelling of the left parotid gland. Ice was applied. The gland continued to swell, became red, and dysphagia appeared; due to the encroachment of the mass on the lateral wall of the pharynx. The leukocyte count was 13,500. After 5 days, pointing appeared, and

the gland was incised but only a few drops of serosanguineous material were expressed. Unfortunately, a culture was not made. She made an uneventful recovery.

Most writers on this subject believe that the infection occurs as either an ascending infection of Stenson's duct, or from pyemia or embolism.

Hanan and Pilliet, in 1899, first advanced the idea of ascending ductal infection. They, however, pointed out that inflammation around the mouth of the duct occurred, which was not the case in my patient, nor was pyemia a feature of this case. Paget, quoted by Lynn (*Surg. Gyn. & Obs.*, 34:367, 1922), believed that secondary parotitis was sympathetic, basing his opinion on the occurrence of changes in the generative organs during epidemic mumps. This, as an etiologic factor, has largely been discarded, however, since it now is known that parotitis is not any more common a complication of pelvic than of intraabdominal conditions. Deaver suggested that traumatism during anesthesia might be a factor, but Lynn points out that many cases in which forcible manipulation of the jaw is necessary do not develop parotitis. Again, this complication occurs in abdominal operations performed under local anesthesia. Jones reported a case occurring in a patient with recurring appendicitis; in the first attack the abscess was opened and drained and bilateral parotitis occurred; 1 year later the abscess was again opened and drained and again the bilateral parotitis occurred; the following year there was another attack of appendicitis and this time the abscess was drained and the appendix removed, and again there followed a bilateral parotitis.

Predisposing factors are said to be chronic oral infection and decreased resistance to infection due to debilitating diseases. Neither of these factors could be considered in my case; oral hygiene here was excellent and there was no debilitating condition; in fact, she went to each operation in excellent health.

Fecal vomiting has been advanced as a cause (Kaiser: *Munchener, Med. Wochsch.*, 68: 1385, 1921) whereby the bacterial flora of the mouth would be increased. There was no vomiting of any sort by this patient.

The high mortality of this complication would speak for the hematogenous route of infection, but in pyemic processes with secondary abscesses in various organs the parotid gland is rarely involved.

The onset is that of an acute suppurative process. There is usually a chill, abrupt rise of temperature to 103° F. or more and always pain over 1 or both parotid glands. In children there may be delirium. The leukocyte count will reveal a polymorphonuclear leukocytosis; then swelling and redness appear with trismus and dysphagia. The condition may resolve spontaneously or fluctuation may develop and demand incision. Humphrey and Sherwood (*Minn. Med.*, 11:722, 1928) point out that, because of the very thick gland capsule, fluctuation is difficult to elicit and that the surgeon should not wait longer than 48 hours if there is not subsidence of symptoms (*Peightal Am. J. Obs. & Gyn.*, 10:88, 1928). Gangrene of the gland is a possibility.

The treatment is preventive, symptomatic or surgical.

Collins (*Surg. Gyn. & Obs.*, 10:404, 1919) states that the best preventive measure is to keep the gland actively discharging a current of secretion down Stenson's duct into the mouth. After trying several methods, he finally concluded that the best was to give the patient an old fashioned lemon candy stick to suck, as acids excite the parotid gland to secrete. There apparently is not enough secretion swallowed to excite active peristalsis of the stomach or bowels. This precautionary measure was neglected in my case. Since she once before had a complicating parotitis, such precaution might have been a means of preventing recurrence of the complication.

## TUBE FLAPS IN RECONSTRUCTIVE SURGERY OF THE FACE

LYNDON A. PEER, M.D.,  
Newark, N. J.

(From the Plastic Surgery Department, Newark Eye and Ear Infirmary)

While the principles involved in making and using pedunculated skin flaps have long been known, it was not until the World War that definite rules for their preparation were formulated; based upon a large amount of surgical experience. In the first operations during the war, trial was made of the then known methods, many of which had been based on 1 case only, the procedures being thereafter assiduously copied from older books to new without test of merit. The main weaknesses of these earlier methods were lack of understanding of the necessity for a lining in all mucous lined cavities and the tendency to hurry the operation. To Major H. D. Gillies and his associates belongs the credit of perfecting the tube flaps. This paper explains their preparation and use in practice at the Newark Eye and Ear Infirmary. The photographs show each step in the restoration of a partial loss of the ear.

Knowledge of the anatomy and physiology of the skin will aid in selection of the appropriate graft to cover any given defect. Most problems of reconstructive work are surgical in character, and a knowledge of asepsis and of the correct handling of tissues is essential. Association with an active plastic surgery clinic is helpful, but the basic principles which underlie the technical application of plastic procedures are those of general surgery.

*Thiersch grafts* are thin shavings of the epidermis including a portion of the germinal layer. Under proper conditions they always grow because the epidermis is normally nourished by lymph from the corium, and when cut away and placed on a denuded surface, it again, in the absence of corium, has an abundant lymph supply from the severed vessels of the surface. The Thiersch graft is indicated where a thin covering is desired which is almost sure to "take". Because it tends to assume a prune-juice color, it is often used to replace superficial loss of skin in burned areas, the



graft blending well with the surrounding discolored skin. It is not suitable where deep scars have been removed because scar tissue will again form beneath the graft.

*Full-thickness grafts* include the epidermis and corium, but not the subcutaneous fat. These do not "take" as often as the Thiersch graft because the corium is transferred to a new surface where it must obtain nourishment from lymph until new vessels have grown into its substance. It may be used to repair any skin loss of the face where there is not deep scarring or distortion of the lips or nose. Tissue loss from one eyelid can be replaced by a full-thickness graft from the uninjured one.

*Tube flaps* may be formed on any surface where the skin is loose. They consist of a tube of skin containing its subcutaneous fat layer. The skin is connected at either end with the adjacent skin surface, much as the handle is connected with the suit case, and the handle, or tube, receives nourishment through each of these attachments. The end which is later to be severed and attached in a new area is called the *distal end*, and the connection which is left in place to furnish nourishment until the distal portion can support itself, is called the *central end*. The procedure whereby one end is incompletely divided, and later completely detached, is called *delaying* the tube flap. This is always advisable as it causes the other attachment to play a larger part in the tube's circulation and prepares it for the more radical change when the incompletely divided end is severed.

Tube flaps are necessary in the repair of deep scars involving distortion of the lips, nose and ears; and for actual loss of the lips, nose or ears. Complete loss of the nose is best constructed from a forehead flap.

One should exercise great care in matching the color, hair-bearing character, and texture of the graft with the skin in the area of defect. A white patch of skin from an arm would appear grotesque on the face of a dark skinned individual; in such a case a tube flap from the neck, migrated up into position, would be preferable.

Upon these facts the surgeon studies each case, and if the condition is extensive, as with burns of the face, he wisely utilizes a variety of skin grafts. Generally speaking, the sim-

plest method of repair is the best, since one may later use a more extensive procedure in case the first fails. Narrow scars not causing distortion are excised and the skin edges brought together. A depression is filled in with fat or muscle rotated in from the sides, with a portion of their blood and nerve supplies attached; or, where these are not available, a fat transplant from the leg is used. A muscle flap which has lost its nerve supply will atrophy. Cartilage also may be used to fill in defects; clinical evidence of its permanence when buried beneath the skin has been shown experimentally by Davis. Flat, thin, burn scars may be replaced by a Thiersch graft and the ectropion corrected by means of a full-thickness graft from the uninjured eyelid. A distortion of the lips and nose or partial loss of an ear must, however, be corrected by a tube flap, taken from the neck, if it is not badly burned, or from a distant part, such as the arm.

#### TECHNIC FOR MAKING TUBE FLAP

*Preparation.* After a suitable location has been determined, keeping in mind the matching of the tube skin with the skin in the area of defect, and the absence of hair where hair is not desired, the surface is scrubbed well with tincture of green soap, washed with alcohol, and then with a mixture of alcohol and ether. Strong antiseptics are contraindicated.

*Anesthesia.* Local anesthesia is used excepting with children; we prefer 1% novocain with 8 drops of adrenalin to the ounce. General infiltration is better than nerve block because of the small amount of bleeding with the latter method.

*Operation.* Two parallel incisions are made, not less than 1 in. apart and about 3 in. long. In general, the length of the tube should not be more than 3 times its width, thus insuring a good blood supply. The skin with subcutaneous fat is dissected from the deep fascia between the parallel incisions, taking enough subcutaneous tissue to provide adequate blood for the skin, but not enough to render formation of a tube difficult. The skin edges are then brought together below with silk sutures, forming a skin tube entirely free except for a connection at either end. The free skin margins from which the tube was raised are then undermined and sutured, effecting a complete closure with

no raw surfaces exposed. If the defect cannot be closed, a Thiersch graft is applied to the uncovered area.

Stitches are removed after 5 days and the tube is not disturbed for 2 weeks. It is then safer to partly sever the *distal end* and re-suture it in place. This throws the burden of blood supply on the *central end* and prepares it for the period when the *distal* extremity is completely detached, 1 week later. At this time all scar tissue is removed about the area which is to receive the graft, and the bleeding is controlled by pressure or cat-gut ligatures. The tube is opened out flat for not more than 1/3 its length, and sutured in its new position. Moderate pressure should be applied to secure firm apposition; but if the tube turns blue it should be returned at once to its original site. A slight blueness about the margins may be disregarded but firm pressure should be applied in such case. Scarification of the flap, to allow surface drainage until proper vessel drainage is established, may be used to relieve venous congestion.

If a mucous surface is to be repaired (as with loss of the lip) it is necessary to have a flap which is covered with epithelium on both sides, and this may be accomplished by covering the under surface of the graft with a Thiersch graft before transferring, or by folding the opened end of the tube and approximating the raw surfaces.

The *central end* of the flap is *delayed* when the *distal end* has been attached in its new location for a week, and after another week has elapsed it is completely severed and sutured to cover the remainder of the area of defect. Sutures are removed in 5 days and the graft is kept covered with vaseline for 3 weeks.

#### PRECAUTIONS

(1) If a tube is used from the arm great care is necessary to maintain the arm in a comfortable relaxed position, and at the same time to insure against tension on the attachment. Measurements should always be made before the operation to be sure that the tube is so placed that it will cover the desired area of the face when the arm is swung up without tension on the pedicle.

(2) Nervous individuals do not tolerate

the arm posture, and it is best to take the tube from a neighboring area.

(3) The method of delaying transfer of one end of the tube flap, by first partially severing its blood supply, is always recommended. The slowest way is the surest way in reconstructive surgery.

(4) If the end of the tube becomes pale when it is cut free, it indicates that there is excellent venous drainage, but very little blood coming into the tube. This is not usually serious, and may be relieved by application of warm compresses.

(5) A venous congestion, as indicated by a blue color, endangers life of the flap, and where this extends beyond the margins, the flap should be replaced and pressure applied to the blue area. Scarification may also be employed.

(6) Avoid cutting and shaping the graft when it is first sutured in its new position. This can always be done later when a firm attachment has been obtained.

(7) Avoid pointed flaps, as they are apt to develop necrosis from insufficient blood supply.

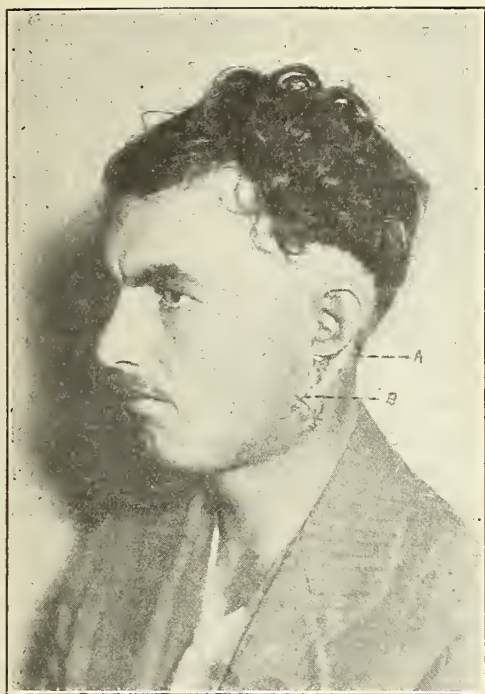
(8) A careful choice of skin should be made as to texture, color and thickness.

(9) Avoid transplanting hair-bearing skin to non-hair-bearing areas. It is always wise to mark out the extent of flap before the skin surface is shaved. X-ray treatment for the removal of hair is not satisfactory because the dosage necessary to remove hair also causes changes in the skin.

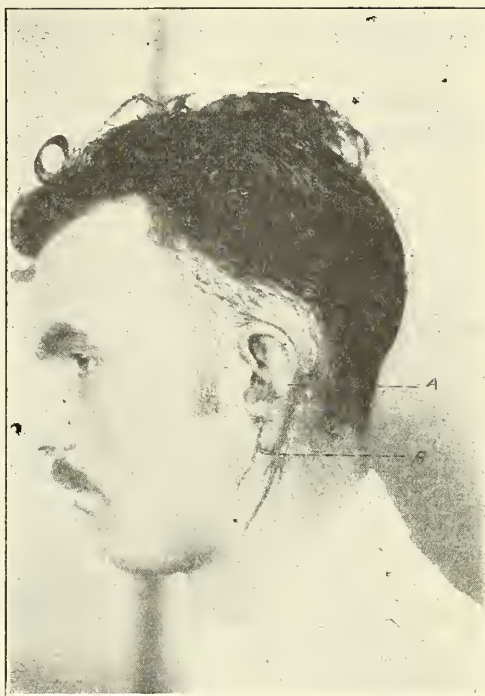
(10) All crusts should be removed from the suture line at least once a day, by means of cotton applicators dipped in hydrogen peroxide, and sterile vaseline applied. Where crusts exist the skin edges tend to dip down and form small pits which are unsightly. When vaseline is applied to a clean wound the serum oozes up through the grease covering and does not form crusts which stick to the skin.

(11) A freshly made tube flap may develop gangrene of its central and most dependent portion. This usually occurs on the first night following operation and is due to the patient lying on the flap, or to a tight bandage. Great care should be used in protecting the tube from pressure.

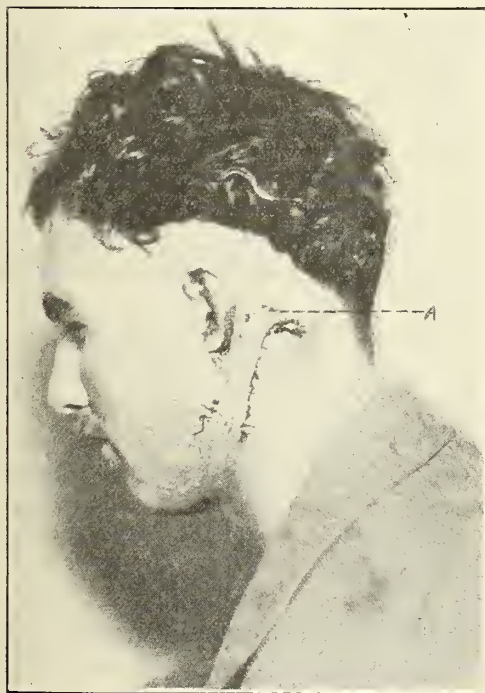




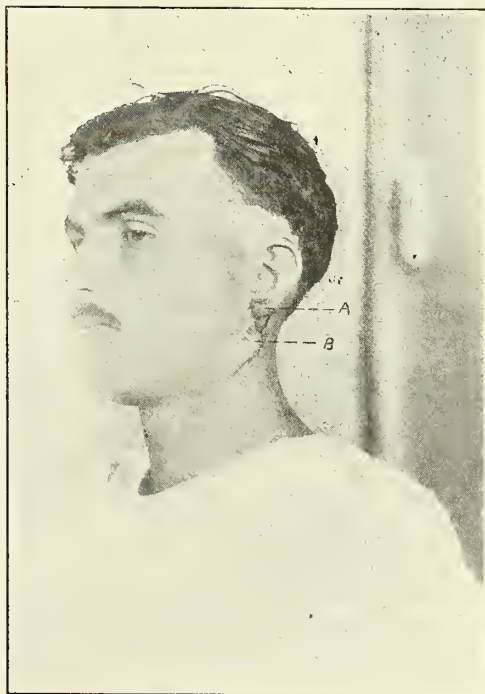
(1) Partial loss of an ear, with a tube flap formed from the loose skin behind the ear. Pictures are taken with sutures in place to more clearly indicate the procedures. A. represents the *distal* end. B. represents the *central* end.



(3) The *distal* end has been completely severed and sutured to the ear at A. At a later date the tube was *delayed* by partly cutting the *central* end at B.



(2) The tube has been *delayed* by partly cutting the *distal* end at A, throwing the burden of blood supply upon the *central* connection.



(4) Tube has been completely severed. A represents the *central* end sutured in place (now healed). B represents remainder of the tube, which is open and sutured to the surrounding skin margins.

## THE GASTRO-INTESTINAL PATIENT\*

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I have been called upon to deliver a talk this evening on a seemingly dry subject—"The Routine Examination of the Gastro-Intestinal Patient". This subject should, however, be of unusual interest to every medical man because of the frequency with which gastro-intestinal symptoms occur in many systemic disorders. Very frequently a lesion of the gastro-intestinal tract is over-looked that could have been easily found if the patient had been put through the ordinary routine gastric examination, and I shall give you the typical routine that we follow at our hospital.

We naturally commence with the *history*, and we attempt to pin the patient down to his chief complaint. Exact location of the pain or distress is of utmost importance; the relationship of this pain or distress to meals or defecation is also very important, and may give the cue to diagnosis. (In practically all cases of duodenal ulcer pain occurs from 2 to 4 hr. after eating, while in gastric ulcer the pain is immediate.)

*Past history* is important. Previous operations may have a bearing on the condition. Diseases such as typhoid fever or dysentery may have permanently affected the gastro-intestinal tract. It is important to know whether there has been aggravation or emotional upset which may have started a gastric neurosis. A family history of neurosis, peptic ulcer or arteriosclerosis may also have a bearing on the condition.

*Physical examination* should be complete. Palpation of the abdomen for masses, tenderness or rigidity should be carefully done. The reflexes must be noted and it is important to ascertain whether the patient is hypersensitive or hyposensitive to pain; it has been found that often patients who are hyposensitive will have a painless peptic ulcer unrecognized until

a hemorrhage or perforation occurs. Rectal examination should be done in every case to rule out hemorrhoids, tight rectal sphincter, carcinoma of the rectum, rectal shelf, etc.

*Laboratory examinations* are important, and a blood Wassermann and urinalysis (chemical and microscopic) should always be made. The stool should be examined for blood, ova and parasites. Gastric aspiration should be done in every case unless it is contraindicated by a cardiac condition. The *Ewald test-meal* is extremely important, because presence or absence of free hydrochloric acid may change the whole diagnosis; the patient may have all the signs and symptoms of a peptic ulcer, but when free hydrochloric acid is found to be consistently absent we must look for another diagnosis. We must differentiate between the true and false achylia by the fractional test-meal. This routine when accompanied by the administration of neutral red and histamin gives the final verdict in these cases. (The finding of a persistent achylia is of utmost importance in the diagnosis of pernicious anemia, achylia gastrica and functional achylia.)

In the *neutral red test* the procedure is the injection of 40 mgm. of neutral red dye intramuscularly and subsequent recovery of that dye from the gastric contents. Where no free hydrochloric acid is secreted by the stomach no neutral red is obtained.

The *Palmer test* is a test for peptic ulcer wherein we give the patient a certain amount of 0.5% hydrochloric acid, carefully and in 2 portions and where ulcer is present there will occur typical ulcer pain which can be relieved by an alkali.

The *Rehfuß atropin test* is used on patients who have had subtotal-gastrectomy; 1/40 gr. atropin sulphate is injected hypodermically and when the mouth becomes dry, a cup of oatmeal gruel is given and then aspirations are made every 15 minutes. This test is to ascertain the secreting power of the stomach after such an operation.

The *Vagus or psychic test-meal* is given in cases where we feel that free hydrochloric acid is present but where we cannot obtain proof through the usual procedure. The ordinary fractional bucket is passed and the patient is given an orange to chew. He expectorates both

\* (Read in part before the Bergen County Medical Society at Hackensack, New Jersey, September 9, 1930.)



pulp and juice. Then aspirations are carried on every 15 minutes. This procedure will stimulate psychically gastric secretion, where the gastric nerves have not been cut.

Biliary drainage by Lyon's method is being supplanted by Graham's cholecystography. Blood studies are important in the gastro-intestinal case to ascertain whether there is present a cholesterinemia, bilirubinemia, eosinophilia, etc. Ferment chemistry should be mentioned as it is important to determine enzymatic function in certain cases.

The esophagoscopic, proctoscopic, and sigmoidoscopic examinations are important for finding erosions, ulcerations, polyps, diverticuli, spasms and new growths. Internal hemorrhoids and strictures are also located by this method.

*Fluoroscopy* done with aid of the barium meal or enema will sometimes give immediately a diagnosis of a condition that has been overlooked for years. I can cite the case of an habitual drinker who was supposed to have had an alcoholic gastritis and who could keep nothing on his stomach. Naturally the family physician thought this vomiting was caused by irritation and inflammation of the stomach and hesitated putting his patient to the expense of special examinations. However, the patient finally came to fluoroscopy and the diagnosis was made in exactly 1 minute after ingestion of the barium drink, for there was a complete, irregular, malignant obstruction of the esophagus at the cardia.

Roentgenography in a great many cases must supplant the fluoroscopic examination, for although gross defects may be seen through the screen, careful studies of details can only be made by means of the permanent film.

*Treatment* may also be regarded as diagnostic because very often the response to a special diet checks up on diagnosis. The important thing in treatment of the non-surgical gastro-intestinal patient is regulation of diet and habits. Important medications are alkalies, hydrochloric acid, belladonna and the sedatives such as bromides and phenobarbital. Rest, both physical and mental, must be considered. Occasionally there is a great relief by gastric, duodenal or colonic lavage.

While on the subject of treatment, I feel that

we cannot overlook the greatly increasing number of functional cases that are usually termed "dyspeptic". These patients compose 90% of all we see with gastro-intestinal complaints, and the condition usually results from improper habits of eating and living.

I think it would be proper at this time to read an excerpt from a radio talk given by myself for the New York Department of Health on that type of case—the group that makes up 9 out of 10 patients who consult the physician for gastro-intestinal symptoms.

The average American inhabitant of the larger cities is the greatest offender in regard to improper eating habits. He takes from  $\frac{1}{2}$  to 1 hour for the noon-day meal; while the continental European takes from 1 to 2 hours. In our business districts there is an excited rush for the restaurant at the short lunch hour; a mad hustle and bustle, the dishes clatter, men are gulping food, some eating from counters, some even are standing; no attention is paid to the quality or the cooking of the food. Around the corner we see men trying to conduct business during the lunch hour. Women are combining shopping and lunch. All this is extremely hard on the stomach and on the individual.

It is essential to have a well balanced diet containing nourishing and wholesome food. Nourishment is essential for maintaining the body weight, for growth and for supplying energy. A diet should contain plenty of vegetables, both green and cooked, because they are the most valuable foods. They contain plenty of mineral salts and vitamins. There are many kinds to choose from. Fruits should also be eaten plentifully, for dried, cooked or raw fruits are good. Milk and eggs rank next in importance and can be tolerated by the most sensitive stomach. Meat is an excellent food but too much should not be taken, as then there would be a strain on the kidneys and the system would store up too much harmful acid; meat should be taken but once a day. Fats are fuel or heat-producing foods and are present in cream, butter and vegetable oils; they should be taken in moderation. Dark coarse breads, such as rye and whole wheat, are better than the refined white bread because they contain roughage, thereby giving bulk to the stool; they

also contain more minerals and vitamins. Water is absolutely essential and at least 6 glasses should be taken per day by the average adult; it should be taken upon arising and between meals rather than with the meals.

When a person is young his stomach can stand a great deal of abuse. As he gets older, he must be more careful of what he puts into his stomach. The average individual should avoid, especially an excess of, tea, coffee and alcoholic beverages. He should avoid peppery, spicy and salty foods; improperly cooked foods, and here I may especially mention fried foods; and should refrain from eating food too hot or too cold. Irritating articles of diet inflame the delicate lining of the stomach and may lead to ulceration, and the kidneys are often affected by such irritating substances.

As to when one should eat, a good rule to follow is "Keep a regular meal time". The stomach naturally rebels when it is starved during the day and over-burdened at night, especially with a full course dinner. Frequent small meals are preferable always to infrequent large ones. Don't skip meals; this causes abnormal hunger which leads to rapid eating or over-eating and the result is indigestion. Over-eating causes a strain not only on the stomach but also on the heart, liver and other internal organs.

As to how one should eat, do not follow the example of the common type of worker or business man in the large city who arises, hurriedly dresses, rushes through a scanty breakfast and hustles out to catch his train, car or bus; rushes through the day, probably snatching a few mouthfuls of food at lunch hour; comes home at night, tired and hungry, sits down to a large dinner and eats so much that he over-taxes his stomach. That man is a prospective customer for the physician. While he is young and his organs resistant, he gets away with it. But sooner or later normal working of the stomach and intestines becomes so disarranged that indigestion, dyspepsia or something worse results.

Among the rules for proper eating, "Keep a healthy mouth" comes first. Poor teeth give poor mastication. Infective material from decayed teeth, diseased tonsils and sinuses, contaminates food. One must chew carefully and

eat slowly in order to grind up the food and mix it thoroughly with the saliva which starts the digestive process. Avoid eating when tired, aggravated or excited, because the stomach juices are held back at such times and poor digestion results. Restrict use of fluids with meals because they tend to wash down food without proper mastication and proper mixture with saliva. An excess of fluids dilutes the stomach juices, thereby inhibiting digestion, and distention of the stomach may arise from such an excess. Drink plenty of water upon arising and between meals, because the body tissues and the intestinal canal need fluid to aid the normal disposal of waste matter.

To maintain proper digestion, one must keep away from the "cathartic habit", which may cause the intestines to lose their normal function and lead to chronic constipation. It is also important to avoid certain fads in diet that are in vogue from time to time. They usually do more harm than good.

In susceptible individuals use of tobacco interferes with the normal digestive process. One must not forget general hygiene, and nothing aids normal appetite and digestion more than recreation, fresh air, sunshine, proper exercises and rest.

In closing, I wish to emphasize the fact that attention given to diet and proper eating habits is more than worth while, when we consider that adherence to these habits may go far in preventing disease.

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## FUNGUS INFECTIONS OF THE SKIN

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The subject of fungus infection of the skin is constantly assuming greater importance in medicine. Since the World War, particularly, fungus diseases have gained increasing prominence. Various observers have estimated that between 50 and 85% of all people in this country have some form of fungus infection of more or less severity. Excluding infection of the scalp, the condition is almost twice as common in men as in women; more common in adults than in children. It is very prevalent



between the ages of 20 and 40. Occupation seems to make little difference. The better class of patients is seemingly more often affected. The general practitioner frequently sees this condition and classifies it with the eczemas. Frequently, fungus infections are not recognized as being parasitic and contagious, a potential source of contamination to others, very difficult to cure, often extremely uncomfortable and many times causing economic loss and disability.

Since 1910 when Sabouraud published a summary of *tinea cruris* and associated lesions, it has been recognized that various forms of dermatoses, from head to foot, may be caused by fungi. The lesions may be extremely varied, superficial or deep, dry or moist, scaly or crusted, local or generalized.

It is my intention to discuss in this paper, more or less briefly, the following forms of diseases of the skin and scalp due to fungus infection; *tinea capitis*, *favus*, *tinea barbae*, *tinea circinata*, *pityriasis versicolor*, *tinea cruris*, *dermatophytosis* and *dermatophytes*.

*Ringworm* of the scalp is preëminently a disease of childhood and is extremely contagious, but disappears spontaneously at the age of puberty. It is commonly seen among poorer classes of children in large cities and frequently occurs in epidemics in schools and juvenile institutions. Contagion takes place directly from child to child, or indirectly through the media of hats, combs, brushes and towels. The commonest type in this country is the large patchy form, and the earliest stage of the disease is the minute red scaly patch. Development is rapid and the characteristic picture soon presents itself in one or more patches of circular discs, chiefly on the parietal regions or vertex of the scalp. The affected hairs become dry, brittle, and lusterless, and break off easily a few millimeters from the surface, leaving the characteristic stumps. The brittleness of the hairs is due to presence of the fungi in and around them. If untreated the disease may persist for years, but usually disappears at puberty leaving no scars or baldness unless treated improperly. Occasionally *tinea capitis* is accompanied by a severe inflammatory reaction forming the so-called *kerion*; an elevated, sharply defined swelling, honeycombed with

numerous follicular openings from which purulent material oozes. Pain and tenderness are usually present, with occasional constitutional symptoms.

*Tinea capitis* is to be differentiated from seborrheic dermatitis, *favus*, *eczema*, *psoriasis* and, rarely, *alopecia areata*. In doubtful cases microscopic examination of the affected hairs will settle the diagnosis. The fungi are easily found in the short broken stumps.

In the treatment of scalp ringworm chief reliance must be placed on x-ray epilation or epilation with thallium acetate. Mechanical epilation is not satisfactory; the hairs are brittle and easily broken and when an attempt is made to remove them a portion usually remains in the follicle and perpetuates the disease. Antiparasitic applications have been used but are also unsatisfactory because they do not penetrate far enough into the hair follicle. The principle of treatment consists in removing the hair, for with the hair go the fungi. X-ray epilation in expert hands is quite safe. The hair usually falls out within 2 or 3 weeks and the scalp remains bald 4 to 6 weeks. One week after the treatment an antiparasitic salve, such as 5% ammoniated mercury ointment, should be applied daily. Its object is to prevent re-infection and prevent other children from contamination.

Lately, thallium acetate has been used to effect epilation. It is useful in children too young or unruly to be subjected to x-rays. The drug is given at one dose by mouth; 8 mgm. per kilo of body weight. Contraindications to use of this drug are the approach of puberty, disproportion between age and weight, and any disease of the kidney. The hairs become loosened in a week and epilation is complete in about 3 weeks. Occasionally, toxic symptoms, such as pain in the muscles and joints, and gastro-intestinal disturbances occur. The drug exerts its effect by acting in some way on the sympathetic nervous system.

*Favus* is a disease of the scalp and of the glabrous skin which is quite rare in this country. When seen it is usually in immigrants. The earliest manifestations are raised erythematous macules and pustules. Crusts develop on these and form characteristic cups or scutula; crusted, pea-sized yellowish discs

pierced by hairs, which are almost pure cultures of the fungi. Patches, irregular in size, and shape and more or less devoid of hair are present. In the active stage of the disease the affected scalp is bright red in color. The hairs are lusterless and dry but not as brittle as in *tinea capitis*. Later in the course of the disease scarring and permanent baldness take place. The diagnosis depends on presence of the scutulas, scarring, and microscopic examination. Treatment is the same as in ordinary ringworm of the scalp.

Ringworm also affects the bearded area, particularly in men whose occupation necessitates contact with horses and cattle. Contagion occurs rarely from man to man, but frequently from animal to man; the latter type producing the severest infection. The disease manifests itself either in an acute or chronic form. The acute type resembles kerion of the scalp in children, with its fairly well defined area of boggy swelling, nodules, pustules and loosened hair; it appears in the chronic form as scaly, slightly inflammatory patches, or as discrete inflammatory nodules. The lesions appear usually in patches although the entire bearded area may be affected. The upper lip is almost never involved; very few cases have been reported. Differential diagnosis must be made from eczema, seborrheic dermatitis, syphilis, and sycosis vulgaris. In eczema and seborrhea, the process is superficial and the hair shafts are never involved. Syphilis causes scarring and pigmentation. In sycosis vulgaris the lesions are superficial papules or pustules pierced by hairs, but hairs are not so loose, and the upper lip is frequently affected. Microscopic examination is often necessary to make the diagnosis. In the treatment of these conditions of the beard, depending on the severity and type of the infection, reliance is to be placed on local antiparasitic applications, mechanical epilation, x-ray therapy, and intravenous injections of iodine, such as diluted Lugol's solution.

*Pityriasis versicolor* is due to growth of the fungus known as *Microsporon furfur* in the superficial layers of the skin. It occurs most commonly on the trunk, but may appear also on the limbs, and rarely on the face. The lesions consist of superficial yellowish-brown,

discrete or confluent scaly patches. Slight itching may be present. The diagnosis is easily made by scraping some of the scales and examining under the microscope, where the fungus is quickly found. Treatment consists in removing and destroying the fungi by daily scrubbing the parts with soap and water and then applying a saturated solution of sodium thiosulphate. Treatment should be carried out for at least 2 weeks after all signs of the disease have disappeared, for reinfection is frequent.

*Tinea circinata* is the ordinary form of ringworm of the body, and is frequently seen in children. The infection is occasionally spread through the medium of household pets such as dogs and cats. The typical lesion is circular in form, has a scaly center and an erythematous, vesicular border. There may be one or many lesions. Slight itching is usually present. Satisfactory treatment consists in the daily application of mild ammoniated mercury ointment.

The eruption termed *eczema marginatum* by Hebra, in 1869, was soon recognized as being caused by fungi. From its site of predilection this eruption is commonly known as jock-strap itch. Both thighs are usually infected. The skin presents a pinkish red appearance, scaling is slight and the borders of the eruption are sharply defined. Tiny vesicles may be seen along the advancing border. The lesions may extend to involve the perineum, the anal region, the genitals and the pubis. In extensive cases the eruption may reach to the thighs. Other parts of the body may be involved, such as the axilla and under the breasts. In the latter location, maceration and ulceration may be superadded; owing to the presence of heat and moisture. Treatment consists in the application of mild antiparasitics, such as resorcin, salicylic acid or ammoniated mercury in salves or lotions. X-rays are a useful adjuvant in obstinate cases.

Forms of fungus infection which are attracting much attention are the vesicular and scaly eruptions of the hands and feet which have received the names of *dermatophytosis* or *athlete's foot*. An individual susceptible to fungus infection may pick up the parasite by walking barefoot on floors of gymnasiums or locker rooms, by using contaminated golf clubs, by



wearing infected jock-straps or leather gloves—to mention only a few of the numerous possible ways. Given a susceptible host plus the conditions of moisture and heat, the fungus will thrive and produce its various manifestations.

By far the most common manifestation of dermatophytosis is the vesicular eruption of hands and feet. The vesicles are usually deep-seated, discretè, fairly uniform in size, skin-colored, and prefer the lateral aspects of the fingers and toes. The vesicles break on account of the thinness of the skin, pressure, heat and moisture. Between the toes maceration of the skin takes place. These processes are characterized by periods of subsidence and outbreak and are more prevalent in the warmer months of the year. Subjective symptoms are usually those of marked itching and burning.

Another common form of dermatophytosis is the scaling type which usually affects the palms and soles and the webs of the fingers and toes. The fourth interspace of the toes is the favorite seat of this type. Itching is not frequent.

On the hands and feet one occasionally sees painful fissures of varying size and depth, which may or may not be associated with other forms of dermatophytosis. These cracks or fissures may sometimes be so numerous and painful as to incapacitate the patient. This form of fungus infection is usually associated with hyperkeratosis or callous formation, most frequently seen on the ball and heel of the foot. On the heel the appearance is that of a horseshoe shaped, dirty-white, or yellowish hyperkeratotic patch streaked with fissures. On the ball of the foot split-pea-sized keratotic patches may form and become the seat of painful, warty growths.

Mention must here be made of the lesions described recently as *epidermophytes* or *dermatophytes*. These lesions pave the way for an analogy between fungus infections of the skin and syphilitic and tuberculous infections. For example, a focus of fungus infection on the feet may rise to a lymphangitis, or a lymphadenitis, may permit fungi or their toxic products to enter the blood stream to produce chills and fever and cutaneous lesions resembling scarlet fever, erythema nodosum, dissem-

inated follicular trichophytes, etc. Many cases of dysidrosiform and eczema-like lesions of the hands have proved to be dermatophytes arising from foci of infection on the feet. These discoveries have opened up a new field in dermatologic research.

The vesicular and squamous eruptions of the hands and feet due to fungi, clinically and histologically, resemble the symptom-complex known as eczema. Peck maintains, in his excellent article on epidermophytosis and epidermophytes, in the Archives of Dermatology and Syphilology of July 1930, that the dysidrotic and squamous epidermophytes represent an etiologically and pathogenically explained special group of eczema, differing from an endogenous allergic eczema, such as that caused by foods or drugs, only through the special constitution and origin of the allergen. These findings are important in treatment. Many patients who have been treated unsuccessfully for eczema, have cleared up only when the primary focus of mycotic infection, however insignificant in appearance, has been eradicated.

In the treatment of dermatophytosis of the hands and feet, the acute eruptions should be treated as acute eczemas, with soothing lotions or wet dressings, such as diluted Burrow's solution, continued for 24 to 48 hours, after which antiparasitic remedies should be applied. Production of a mild inflammatory reaction aids in eradicating the infection. X-rays have been found useful in shortening the course, by some way changing the nutritional substratum of the affected parts. Each case must be treated individually. A remedy which has given results in one case may be found absolutely useless in another which appears similar.

As a correct diagnosis of fungus disease of the skin is often dependent upon finding the causative agents, which fortunately in this group of diseases are known, a knowledge of the means of their detection is essential. The simplest technic for examining hair or scales, or the tops of vesicles, is to take some of the suspected material, place it on a clean glass slide, add 1 or 2 drops of 30% KOH solution, apply a cover glass and then examine under the microscope. In the case of infected hairs the fungi may be seen in the form of minute

closely set dots in or around the hairs, or both, depending upon the causative organism. When present they are very easily seen. In infections of the hands and feet, however, search for the organisms must be prolonged and several slides must be examined because the fungi are more difficult to find, and are rarely found in lesions of the hands. When direct microscopic examinations are negative, cultures may sometimes be positive.

The most recent advance in diagnostic method has been in the use of trichophytin. In many cases of dysidrotic and squamous lesions of the hands, when microscopic and cultural examinations were negative, trichophytin tests have given positive results. The trichophytin is injected intraeutaneously and the local reaction read in 24 hours to 5 days. Delayed reactions are frequent. When positive, a raised erythematous area develops at the site of injection and there is a flare up in the suspected lesions. The trichophytin test has proved that fungi are capable of developing the allergic state in susceptible individuals.

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### **TREATMENT OF WHOOPING-COUGH BY INTRAMUSCULAR INJECTIONS OF ETHER**

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Treatment of whooping-cough still presents numerous advocates and enthusiasts of various methods of therapy. Laurence W. Smith, in a review of the literature, grouped the forms of therapy into 5 main groups: (1) A varied assortment of drugs used systemically; (2) local application of drugs to the nasopharynx and larynx; (3) vaccines in small or large doses; (4) numerous forms of applied physiotherapy including the use of diathermy, ultra-violet light and the Roentgen ray; (5) the use of ether by intramuscular injection. Experience with the last of the above named methods warrants our endorsement of it as the method of choice in treatment of whooping-cough.

The literature on ether therapy in pertussis presents a wealth of articles, mostly by foreign authors. In 1914, Audrain first suggested use of ether in the treatment of whooping-cough and from 1914 until 1920, although his work was interrupted by the War, he continued to publish favorable reports on such ether injections. Vaccarezza and Inda, in 1921, using the method advocated by Audrain, administered ether intramuscularly to children every other day for 5 or 6 injections in doses of 0.5 to 2 c.c. and reported that by the third injection the pertussis symptoms had often disappeared entirely, the effect of the first few injections being always more pronounced than the effect of the later ones. They emphasized the absence of any ill effects, in answer to Auricchio who, in a report on 24 cases, brought out the fact that ether exerted a deleterious effect by bringing about a state of excitement in children with the spasmophilic diathesis.

The European journals of 1921-22 contained many reports favoring the use of ether as a specific for whooping-cough. Martinez, Veronese, D'Aroma, Lassablière, Klotz, and Veltoni are but a few of the many who reported favorable results in small series of cases; all stating that ether gave more satisfactory results than any other drugs. D'Aroma gave in several cases as high as 6 c.c. of ether daily. Genoese reported on 50 patients benefited by this treatment and believed ether superior to vaccine therapy, recommending ether as practical, harmless and inexpensive. Reim treated 37 cases with ether to which he added camphor; after 5 or 6 daily injections the paroxysms were reduced from 24 and 28 to 6 and 8, and no bad results were seen even in infants. Magni reported ether treatment of 35 children with 17 cures, 8 improvements and 9 patients showing no change. Graesser gave a detailed report of 21 patients, ranging in age from 2 months to 3 years; there were 3 complete cures, 14 showed improvement, and 2 did not show any effect; average duration of the disease was about a week though improvement showed after the second or third day. Bedo was impressed by the coincidence that pertussis had been entirely cured in 2 children given a general anesthetic for an operation. He treated whooping-cough by intramuscular injections

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\*(Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Pediatrics, Atlantic City, June 12, 1930.)



of ether to a total of 5 c.c. per injection. Panayotaton reported on 25 cases, giving 2 c.c. ether on alternate days; all cases cured in 12 to 15 days.

The first report in the American literature on the use of ether for the treatment of whooping-cough was made by Mason, in 1923, when he published his results with 26 patients, aged from 6 months to 8 years, of whom he reported 60% stopped coughing and were apparently cured, 24% definitely benefited, and 16% failed to respond or became worse. Drake reported several cases treated with very good results; vomiting ceased after 1 or 2 injections and no serious complications followed in any of the cases. Abraham Tow reported 82% of his cases, or 50 out of 61 children, improved. The ages varied from 20 days to 7 years, and he stated that the number of paroxysms were reduced, their severity lessened, the appetite improved, the children slept and rested better. He reported 9% of his patients as having localized abscesses and necrosis of tissue. Alton Goldbloom reported favorable results but favored use of the ether by rectum to avoid abscess formation at the site of injection. Elgood summarized his experience with the ether treatment by saying: "Ether will check completely 25%, fail completely in 25%, and give considerable improvement in 50% of the cases." Guinea in a report on 302 cases treated by this method classified 250 patients, or 83%, as definitely cured, 35 patients very much improved, 17 not relieved; no complications. He gave from 3 to 5 c.c. of ether on alternate days. Pollock stated that in his 107 cases treated by ether injections 50% showed improvement after second injection, within 3 days, and 20% after the third injection. Summers was enthusiastic over his experience with private patients, stating that the ether treatment had given gratifying results, especially in cases with complications. In families where there was more than 1 child with pertussis, he attempted to make comparisons of results with ether and vaccine therapy. The child with the more severe symptoms received the ether injections. In his opinion, in all cases ether proved the more effective treatment. He noted a response to treatment usually after the first injection. Magliano and

Newman reported favorable results but in a very small number of cases.

Reporting on the treatment of whooping-cough by injections of ether, in July 1928, we pointed out that on account of the high percentage of necroses it did not seem a desirable treatment. Later experience with a modification in the method has caused us to change our opinion, and we are making this report on 104 cases of whooping-cough treated at the City Dispensary, Newark Department of Health, between May and August 1929, by intramuscular injection of ether in oil. Our children varied in age from 2 months to 10 years. Realizing the uncertainty of positive early diagnosis of whooping-cough, we accepted for our experiment only those cases in which the diagnosis was most certain.

Our results are classified as follows: *Improved*—where the child showed a definite decrease in the number of coughing paroxysms, whooping and vomiting spells, an increase in appetite, with more restful periods during the day and night; where the duration to date, including the period of treatment, was not more than 3 weeks. *Unimproved*—where the child appeared the same or worse than when the condition was first seen. *Slightly improved*—where the number of paroxysms of coughing, vomiting, and whooping were decreased in number but not sufficiently to warrant a feeling of satisfactory treatment; where the child appeared improved but the period of duration was more than 3 weeks.

Of the 104 patients, 76 (74%) were termed improved; 23 (22%) unimproved; 5 (4%) slightly improved; 94 patients received the usual dosage of 1 ampule containing 1 c.c. of ether plus 1 c.c. of oil; 10 patients received double the dose or 2 ampules. Of these 10 patients, 5 were among the improved, 5 among the unimproved. Among the entire 104 patients treated, no abscess or necrosis at the area of injection was seen. Our procedure was to cleanse the skin with 5% tincture of iodine, wash off with 95% alcohol, and give the injection deep into the buttocks, alternating sites of injection. No other medication was allowed.

It was noted that in the colored children treated the substance injected remained for 48

to 72 hours; in some cases as a circumscribed hard area. In white children, the material was absorbed within 24 hours.

Among the improved cases, 68 patients received not less than 4 nor more than 7 injections. Among the unimproved, the 23 patients received from 4 to 11 injections.

We were unable through the Dispensary to follow up our patients to see if the improvement was lasting. The mothers failed to return as directed; only 16 returning to state that no relapse occurred. All the children bore the injections well. The age of the patient did not seem to enter into the matter of improvement or dosage.

In reviewing our experience with this method of treatment, we naturally pause at our failures and try to account for them. Why one case of severe whooping-cough should respond to treatment while an apparently milder case does not, is a problem that still confronts us.

To attempt to explain the success or failure of any treatment in any given disease one must turn to the pathology of the disease and to the method of attack by the treatment on that disease. Of the pathologic anatomy in whooping-cough, Osler said—"whooping cough itself has no special pathologic changes". Holt and Howland say that the only constant lesion of pertussis consists in a catarrhal inflammation of varying intensity which affects the mucous membrane of the larynx, trachea, bronchi, and sometimes that of the nose and pharynx. The seat of the irritation which produces the cough has been variously located by different observers. The weight of evidence seems to be that in a great majority of cases the source of irritation is in the larynx or trachea. Von Herf, by laryngoscopic examination, found the mucous membrane of the larynx to be swollen and congested, and that a paroxysm could always be excited by irritating the mucous membrane between the arytenoid cartilages. Removal of mucus from the posterior laryngeal wall shortened the paroxysm. Rossbach reported negative laryngoscopic findings but found a plug of mucus in the trachea which he qualified as the cause of the paroxysm.

There has been much discussion as to the rôle of the enlarged tracheobronchial lymph-nodes in the pathology of whooping-cough.

Laurence W. Smith, reviewing 3000 case histories, found that in about 80% of cases there is a demonstrable peribronchial thickening involving chiefly the lower branches of the bronchial tree. During the course of the disease, within 7 to 10 days, there was a demonstrable diminution in the peribronchial shadow, as shown by Roentgen rays. Concomitant with the peribronchial thickening is an enlargement of the tracheobronchial lymph-nodes. Smith reported recovery of the pertussis bacillus culturally in 7 out of 8 fatal cases. He believes that action of the bacillus is a mechanical one, interfering with the normal action of the cilia and possibly leading to their destruction. This might prevent the normal removal of secretion, resulting in a continuous irritation and the characteristic cough. In addition, Smith states the evidence of a mild toxin, as shown by presence of a slight inflammatory exudate, by a lymphocytosis, and by formation of a specific antibody which produces fixation of the complement.

It seems, therefore, that the accepted pathologico-anatomic findings in whooping-cough consist of a catarrhal inflammation of the mucous membrane of the upper respiratory tract—nose, pharynx, larynx, trachea, and bronchi with a peribronchial thickening that results in tracheobronchial adenopathy.

Ether may exert any 1 of 5 actions: (1) an antispasmodic action on the bronchial spasm; (2) it may act as a sedative on the striated muscle; (3) as an anesthetic to the larynx, thus diminishing irritability of the mucosa; (4) as a sedative or anesthetic to the respiratory center; (5) as an antiseptic and bactericidal agent.

In our work in the clinic, on a few occasions we noted a distinct ether odor on the child's breath 15-30 minutes after the injection. Mason reported a similar experience with a few of his patients and noted in 1 case that the ether odor persisted for almost 6 hours. It seems plausible that the ether when injected intramuscularly is absorbed and eliminated or excreted in ether vapor through the lungs.

Audrain in his original report thought ether by inhalation or by injection exerted an antiseptic and bactericidal effect. Magni thought ether exerted its effect by a combination of its



antispasmodic, febrifugal, and antitoxic effect; that elimination of ether through the lungs allowed the drug to reach the most minute recesses, attack the bacteria lodged between the cilia, and affect some moderate destruction of the bacteria. Magni also thought the ether might stimulate phagocytosis or raise the antibody content of the blood, thus attacking the toxin of the bacteria. Genoese believed that ether injected has a specific action on the organisms causing pertussis, as well as relieving the paroxysm and breaking up a tenacious sputum. Ether has been used as an antiseptic to the skin in gynecologic work and Genoese believed that by its elimination through the lungs it acted as an antiseptic to the entire respiratory tract.

In summarizing, we wish to bring out the fact that our results in a moderately large series of cases seem to bear out the work done by other investigators abroad and in this country. We feel that with this manner of treatment, ether in oil intramuscularly, there is no danger of abscess or necrosis at the site of injection. We feel that this treatment offers a definite means of aiding the child with whooping-cough. We offer no explanation for our failures other than the fact that since the treatment was so well tolerated, perhaps larger dosage should be used. We suggest a further study with double the dosage or even larger doses, since it may be that a larger dose will bring even better results. We further feel that in a disease as distressing as whooping-cough, especially in very young infants, any form of treatment which can be easily administered and which gives encouraging results in a fair percentage of cases should be given a trial.

#### DISCUSSION

*Dr. Arthur Stern* (Elizabeth): About 6 years ago one of my colleagues asked me whether there was anything known that would give his child, and the whole household, some rest at night from the child's incessant whooping-cough spells. I spoke to him about injections of ether intramuscularly, which I had used in connection with vaccine treatment with good results but warned him of possible skin necrosis. When I met the physician some time afterward he thanked me for my advice and told me that the relief had been instantaneous.

In another very severe case of bronchopneumonia, in connection with whooping-cough, treated by another colleague, the improvement was rapid. I have since used the injections in bad cases and I want to congratulate Dr. Levy on his improve-

ment in bringing to us a staple form in his new ampules. I have used them a few times in hospital practice and shall use them again if necessary. Anything as effective as this remedy is a great blessing to suffering children and to their parents, in such a miserable disease as whooping-cough.

*Dr. Julius Levy* (Newark): In the first place I want to congratulate Dr. Finkelstein for the very fine way in which he has presented this subject, and to make clear that this work has been entirely done by him. In appraising the value of this report, an important thing is to be sure of its reliability because, particularly with whooping-cough, we have previously heard of a thousand sure remedies and doctors are justified in being very skeptical of all new suggestions. I would emphasize that we should not become enthusiastic just because we see 1 or 2 children apparently getting better, because whooping-cough itself varies a great deal in severity and duration, and it is very easy to believe that the improvement is due to your treatment rather than to the passing of time. I think care has been exercised in estimating improvements and cures, yet I think this skepticism is entirely wholesome. It is, therefore, desirable to collect as many series, and as large series as possible, in different seasons because all infectious diseases vary a great deal in intensity, severity and duration. It is not uncommon to see several cases of whooping-cough in the same family, one lasting 3 months and another only 3 weeks, so I think we should be very guarded in our estimates of any therapeutic measure.

I think it is worthwhile mentioning, on the other hand, the slowness with which we take on new methods. Treatment of whooping-cough by ether injections has been written about considerably, for the past 10 years, and it is still not used very extensively in America. While I think it is proper that we should be skeptical, yet, on the other hand, it should not take 25 years for a new idea to be accepted by the medical profession. I think the effect of making a report like this on a very large series of cases is at least to hasten a trial of this remedy.

Necrosis is important. We reported 100 cases and indicated that we thought the treatment should be given up because about 25% of them presented necrosis. I discussed this question with a laboratory worker and he suggested putting the ether in oil, in ampules, and since then we have had absolutely no necrosis and no difficulty.

Dr. Finkelstein referred to this peculiarity, that it does help some patients and not others. Apparently he thinks we have no answer. But that does naturally raise a question in our minds as to the direct efficacy of ether in the treatment. After all, it does seem strange that it should be effective apparently in some cases and not effective at all in others. There is no question that in some of the cases it does act almost miraculously, especially—and this is very important—in some of the very small infants. Whooping-cough, of course, is a very grave disease in infants under 1 year. Whooping-cough and measles cause more deaths under 1 year of age than all the other contagious diseases combined. It does seem that in these young patients it is particularly effective. I think that is one of the most encouraging things about it and I feel that all of the men who have an opportunity to try it should do so and then report their results.

*Dr. F. I. Krauss* (Chatham): I wonder if the varying results that Dr. Finkelstein shows might not be due to his dosage given intramuscularly be-

ing too small for the occasional patient. I have not used ether in this way, but use it continually in whooping-cough cases, by intrarectal injection in olive oil, and I find that I can vary the dose from 2 to 10 c.c. once or twice a day according to the severity of the case. Some require 2 c.c. and others 10 c.c., and I find that my results have depended on the size of dose. That, of course, would be a distinct drawback for the intramuscular injection. It seems to me it would be difficult to give larger doses, for it is a painful method of treatment. I have never used it because I have no public health work. My treatment of whooping-cough is confined entirely to private practice and there would be objection by the parents. I would object to giving it every day or so because of the pain, and we know how difficult it is to have mothers agree to a treatment that is painful.

*Dr. A. S. Finkelstein* (Closing): I have never had any experience using ether by rectum. As far as the dosage is concerned, that is a great problem in treating whooping-cough by injections of ether intramuscularly. As to its being a painful procedure, all patients that were old enough to walk got off the table a few minutes after the injection and walked off. The material is absorbed in 24 hours or sooner. The following day it is entirely absorbed, just the skin prick being noticeable.

As to giving larger doses, in 10 of our cases I gave 4 c.c.; 5 were improved and 5 unimproved. In a very small series of cases now going on at the City Dispensary I have given as much as 6 c.c., which consists of 3 c.c. ether and 3 c.c. oil. Some showed improvement with 6 c.c., and some with 4 c.c. did not show improvement.

There is one point that may be of practical help. In getting the ether out of the ampules it is necessary for the syringe and needle to be cold. It does not come out of the ampule easily if the syringe is hot and it is difficult to handle but if the syringe and needle are cold there is no difficulty whatever.

*Dr. Hummel*: May I ask what preparation you use; and are the ampules on the market?

*Dr. Finkelstein*: They are on the market and are prepared by the Lozier Laboratory. The ether is put up in a bland vegetable oil similar to peanut oil; 12 ampules to the box.

## NON-PATHOLOGIC OR FUNCTIONAL HEART MURMURS IN CHILDREN\*

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There is a large group of children with heart murmurs who are not suffering with cardiac disease. Because this fact is not always kept in mind some of these children are unnecessarily invalidated, their activities are restricted

and they become the objects of undue anxiety. Aside from harmful neurotic tendencies acquired by a child stigmatized as a victim of "heart trouble" parents are needlessly alarmed. The ratio of non-organic to organic murmurs is 3:2, based on the study of many thousands of school children.

Many authorities state that non-pathologic or functional murmurs are rare under 3 years of age. This is not true, for frequently infants during an acute infection or a septic blood condition present cardiac murmurs; usually soft systolics at the base or apex, which disappear upon improvement of the child's general condition. In the septic cases, autopsies have shown no heart pathology. Feer reports a case of a baby 10 weeks old with sepsis, who before death had a very loud systolic murmur in the pulmonary area and at autopsy no abnormalities were found in the heart. Jacobsohn reports the case of an infant in whom a soft systolic murmur was heard over the base of the heart at the pulmonic area on the fourth day of life following a severe intestinal hemorrhage on day of birth; with improvement in the blood picture after treatment the murmur disappeared and remained absent after the eighth day. This is the earliest case I have found reported in the literature.

I have had the opportunity of observing over a period of 3 years 50 children with non-pathologic heart murmurs, in the cardiac clinic for children at the N. Y. Post-Graduate Medical School and Hospital. This study is not yet completed. A recent study at Bellevue Hospital showed that 4 out of 100 cases of non-pathologic murmurs became definite organics after 1 year. None of our series has shown organic changes, but observation over several years is necessary in determining the final outcome of these children. Three of the children in this series have lost their murmurs during periods of 6 months to 1 year. One girl under observation for 2 years with a faint systolic murmur at the apex and no enlargement of the heart has been allowed normal activities; 6 months ago, with onset of menses, body changes of puberty, increase in weight and height, no murmur was heard and there has been none up to the present time.

\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Pediatrics, Atlantic City, June 13, 1930.)



### TYPES OF MURMURS

As a general rule the murmur is a short, soft, systolic heard over the base of the heart in the pulmonic area or at the apex. There are 3 main types:

(1) *The cardiopulmonary*, or so-called respiratory murmurs. These are heard over the pulmonic area or third to fourth left inter-spaces along the sternum. They vary with respiration, being usually loudest at end of inspiration and faintest with expiration. These murmurs, changing with position, become louder when the child is lying on its back. Even pressure with the stethoscope causes increase or decrease in intensity. This type is very common, comprising 20 to 40% of the non-pathologic group.

(2) *Atonic murmurs* are heard best at the apex and pulmonic areas and have a soft blowing character. They are found especially in asthenic children and have been attributed to a vagus atonia. Dioxades has pointed out that x-ray pictures of these children show a broadening of the heart shadow to the right. There may be loss of tone of the heart muscle, and thereby a relative insufficiency of the mitral valves is caused. In fevers such as scarlet, typhoid, grippe, influenza, tonsillitis and pneumonia, or almost any acute febrile disturbance, this murmur is not infrequently found. It may suggest endocarditis but with convalescence it disappears. The pulmonic second is never accentuated in the presence of this murmur. These comprise the largest group, 60 to 80%. *Hemic* murmurs are usually of the same character as these atonic murmurs and are present in anemic children.

(3) *Venous humming* murmurs at the base of the heart, which Palmer and White have recently described in detail, are continuous humming murmurs heard in the supra and infraclavicular regions especially on the right side and transmitted to the vessels of the neck—best heard on raising the chin and turning head to the left. The murmur is similar to the one of patent ductus arteriosus and must not be confused with it.

*Symptoms.* The symptoms are seldom cardiac, unless the parent, knowing that the child has a murmur, stresses such symptoms as fatigue, pallor and precordial pain. Practically all

of our cases were discovered in routine physical examinations for other conditions; mostly preliminary to tonsillectomies, or referred by school authorities with note saying that child has a murmur.

*Diagnosis.* The diagnosis is established by: (1) absence of rheumatic history, chorea, growing pains, repeated acute tonsillitis; (2) consideration of the general condition of the child—malnutrition or anemia or an acute febrile condition; (3) size of the heart—no enlargement demonstrable by physical examination radiograph, but shape of the heart in the radiograph is important for if it is of mitral shape or indicates ventricular hypertrophy acquired heart disease must be considered; (4) the murmur—its character, time location variability; (5) absence of accentuation of second pulmonic sound, which is always present in acquired or congenital heart conditions; (6) electrocardiographic studies.

When the electrocardiograph shows a preponderance of the right ventricle it is assumed the case is one of pulmonary stenosis, which is a frequent congenital defect. Also, left sided defects like patent interventricular defects and patent ductus arteriosus cause a preponderance of the left ventricle. Neither sign is found in non-pathologic hearts.

*Differential diagnosis.* In congenital heart disease, besides the electrocardiographic evidence, cyanosis with clubbing of the fingers is almost a regular clinical finding. The murmurs are louder, rougher and longer (extending into diastole) than the non-pathologic ones. They are found early in life and are persistent. A marked thrill over the heart is frequent and also a chest deformity with accompanying general lack of development will be present.

The acquired murmurs usually have a rheumatic history, cardiac enlargement accentuation of second pulmonic sound and a murmur of definite character, viz: the rumbling, rough or low pitched murmur of mitral stenosis. However, the murmur of mitral insufficiency may be the same as a non-pathologic one.

### TREATMENT

(1) Impress the parents that the child is not a cardiac but should be kept under observation for at least 1-2 years; examinations

at the hospital once a month for a year, then once every 2-3 months.

(2) Do not make a mental invalid of the child and do not limit physical activities except for the active over-tired child.

(3) Remove any foci of infection; carious teeth, diseased tonsils and sinuses.

(4) Treat for malnutrition with increased diet, and tonics to improve appetite; Tr. nuxvomica 5-10 drops before meals.

(5) Treat anemia by removing cause, if possible; focal infection, intestinal parasites, lack of fresh air and sunshine. Saccharrated carbonate of iron, 10-30 gr. 3 times a day, and high protein diet have corrected the anemia.

(6) Regulate the child's life; to bed early at night, daily baths which tone up the circulation, ample nutritious diet with attention to the vitamins.

Two illustrative cases and their progress follow:

*Case 1.* G. I., girl, aged 4 yr., has a sister aged 6 who is a cardiac. One year ago she had grippe. For the past 2 weeks has had bilateral discharging ears and tender, enlarged cervical glands on both sides. Temperature normal. The tonsils were enlarged, inflamed and cryptic, and the cervical glands bilaterally enlarged but discrete and slightly tender. The heart was not enlarged; the rate was normal. The apex was localized in the fourth space within the nipple line. A short systolic murmur was heard in the fourth left interspace—not transmitted. There was no change in the murmur after exercise, position or respiration. Her weight was 29½ lb. Tonsillectomy was performed and 9 months later weight was 33½ lb.; glands were not enlarged; no murmur heard.

*Case 2.* E. B., boy aged 12, had pneumonia at 1½ years; pertussis 3½, measles at 5, and was subject to frequent sore throats. Tonsils were removed at 18 months; again at 10 years of age. Three years ago complained of slight fatigue. He was referred from general clinic as possible cardiac, as a murmur had been discovered on examination. His weight was 121½ lb. General appearance and color good. Marked dental caries with gum infection. The heart was not enlarged; rate and rhythm normal. At the apex a faint blowing

systolic murmur was heard. Advised removal of carious teeth and no restrictions in activities. Ten months later his weight was 123 lb. The carious teeth had been removed. No murmur was heard.

#### Discussion

*Dr. Stanley Nichols* (Long Branch): I am sure we are all very thankful to Dr. Okin for this very comprehensive paper on a very much neglected subject. To me, this is the greatest problem we have in the field of children's heart disease. There is no question that thousands of children in this country are unnecessarily made, not only physical, but mental, invalids by some one pronouncing a heart murmur to mean heart disease. The mental part of it is the worst because the physical part may disappear.

The proportion of these functional to organic cases is so large that it justifies the doctor hearing a heart murmur in calling it non-pathologic, if he has any doubt. If he is not sure in his own mind the first time he sees the case, after taking the history and listening to the heart, that it is a definite acquired or congenital murmur, he may wait 6 months or a year before deciding this point—making repeated examinations meanwhile. He is thus easing the mother's mind and at the same time making sure. I would say, roughly, that 60% of heart murmurs can be classified at the first visit, but certainly 20 to 30% will take 6 months or a year to prove. A mental fear may be very serious. It does not bother the child very much unless he becomes a mental invalid, but a mother immediately takes fright. You can say to her that her child has some tuberculous condition, or nephritis, and while she will be moderately alarmed, she will not be half as frightened as by the report of a heart murmur. The reason for this is the impression that heart disease has made on the human mind. For instance, she reads that some friend dropped dead in her home last week, or someone in a prominent position is well today and gone with heart disease tomorrow. So, while perhaps 90% of heart cases die of a lingering illness, heart disease to the public means death and probably sudden death. Mothers generally have that idea firmly in mind, and so is created a mental invalidism, something that is difficult to get rid of. We should be absolutely negative on heart murmurs being organic until we are absolutely sure of our ground. Dr. Okin has covered that point and has emphasized that these children should be followed for a period of 5 years. How long should a non-pathologic murmur be followed? If in 6 months to a year you have decided that it is a non-pathologic condition, you should say to the mother—"This shows no evidence of being organic." It should be remembered that you have to treat the child and the mother, and the mother is really more important. After you have studied the scientific problem, then study the mother. If she is well balanced and not inclined to take alarm, you can tell her that if the child develops any symptoms she must bring it back. Unfortunately, many mothers are not so well balanced. The very words "heart murmur" cause them so much mental fright, that it is better to say to the majority of mothers that they had better return with the child every 3 to 6 months so that you can watch the condition and keep their fears allayed. This may have to continue throughout childhood. You will be accused of wanting to fill up your office at the public ex-



pense, of course, but you will be doing justice to the patient and keep this child out of the hands of some one who may invalidate it and give unnecessary treatment. If you discharge a nervous mother and child and say that the condition is not organic, in 3 months to a year some other doctor will hear this heart murmur and start the ball rolling again.

The routine treatment unfortunately given to many children with heart murmurs is simply to administer digitalis, and not let the child do very much. There is only too often no careful study made to find out whether it is a congenital, acquired, or non-pathologic murmur.

The pediatricians are peculiarly equipped to handle these heart problems, more so than some cardiologists, because they often have more interest in the child heart and see it from a different viewpoint. Far too many cardiologists think that the child is a small replica of an adult, and treat its heart accordingly. If we follow the treatment Dr. Okin has outlined, we will be doing a very satisfactory service, and perhaps cure what might cause a mental invalidism to the mother and sometimes to the child. While you may say that is a part of the art of medicine rather than the science, you can first practice the science, making sure the murmur is not pathologic, and then practice the art, which is to keep the patient's mind free of mental invalidism.

*Dr. D. J. M. Miller (Atlantic City):* I did not hear the essayist's paper and heard only part of the discussion, but I did hear the doctor say, and I would like to endorse the fact, that there is a great amount of unhappiness caused by the knowledge that a child has a cardiac murmur. You pediatricians have seen cases sent in, particularly by school doctors, and the mother in a great state of apprehension because a murmur has been discovered. I only want to say this, that in my own experience the most common so-called functional or non-pathogenic heart murmur heard in children is the pulmonary systolic murmur which is heard at the base of the heart, usually on the left side, sometimes on the right and sometimes even down as far as the apex. I think it can be safely said that if the child has a heart murmur, particularly in that situation, and there is no other sign of heart disease, the child can be dismissed without further examination and without further following up of the case. The mother's fears can be allayed and the child can be allowed to go on with its ordinary amusements and exercises. Too many children are hampered because they have a heart murmur.

There is another functional murmur heard which is generated in the lung, the so-called cardio-pulmonary murmur; definitely connected with respiration, I think. If that feature is noted I think those murmurs also can be dismissed with perfect confidence that they are not organic.

*Dr. F. C. Johnson (New Brunswick):* I would like to second very strongly what Dr. Nichols said about these cases, and what Dr. Okin probably believes about the treatment of the family, but I would like to go even further; I wonder if very often, with certain people, it would not be legitimate to say nothing at all about these heart murmurs which you are convinced are non-pathologic? It may be that the patient will go to some one else who will bring the condition home forcibly and want to treat it as a heart disease, but why not let some of these murmurs go until they are perhaps outgrown, the patient being seen regularly several times a year, as many of our patients are coming to be observed? There might

be a great deal of nervous strain saved if functional murmurs were not mentioned.

As to the classification of these cases which are called non-pathologic: is the condition of the heart in which the ring is dilated and the murmur produced by relaxed muscle or ring strictly non-pathologic? It is not a normal heart but it is not the function of the cardiologist to treat it. The treatment is not heart treatment, at all, but general treatment of the patient; so that this condition should be, I think, distinct from those cardio-respiratory and other non-pathologic functional murmurs which do not amount to anything.

Has there ever been anything gained by taking an electrocardiogram of the cases which were clinically thought to be non-pathologic?

*Dr. Irving Okin (Closing):* In this group, these electrocardiographic studies were made more from a scientific than a clinical viewpoint and certainly we do not do them in private practice. I have never seen a case where the electrocardiographic study alone made the diagnosis; it was made clinically every time.

As to considering them as a pathologic group, that was the point I tried to bring out, that it was not heart disease or rheumatic disease. We consider the rheumatic heart as a part of the rheumatic disease. We do not feel that these cases are definite organic cardiacs. The valves are not sclerosed, there are no inflammatory changes in the valve, and at autopsy, where the patients have died of other conditions, there was no cardiac pathology.

Do not treat the heart but treat the general condition and by building up the whole system and bringing the child into the best possible state of health you will probably bring the heart muscle into the best possible state of health at the same time.

Dr. Miller said we should dismiss these children once we have made the diagnosis, and Dr. Johnson suggests that we should say nothing to the parent about the condition. I have had one unhappy experience. One day, while I was away, another doctor was called to one of my patients and the family was very much worried because he found this murmur and told them about it, and of course the whole cycle about which we have been talking was started. I assured them that I had heard the murmur and that it did not amount to very much. I think you should mention it to the mother to protect yourself.

## INTEGRATION OF THE CHILD\*

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The practice of pediatrics has altered materially during the past generation. A consideration of the various types of work now involved in the care of the young demonstrates the tremendous variety of interests and functional organizations. One need but enumerate

\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Section on Pediatrics, Atlantic City, June 13, 1930.)

such problems as are involved in child hygiene, prevention of blindness, growth of boarding homes, development of pre-natal work, pre-school examinations, medical inspection of school children and the inception of various types of clinics for mental hygiene and for meeting the problems of exceptional children. One notes the existence of a large variety of lay organizations dealing with juvenile problems or, indeed, with specific phases of work with children. Under this head are found, for example, groups organized for fostering clinical services in settlements and schools, for promoting welfare during infancy, urging diphtheria and tuberculosis prevention in communities, as well as lay groups interested in the moral status of dance halls, pool rooms and theatres; and those who are specially cognizant of the needs of industrial hygiene, limitation of child labor, special classes for handicapped children and who propose various modes of elevating childhood from the education of parents to their abolition. This variety of interest in juvenile welfare has developed without serious participation of pediatricians.

Today one finds a shift of emphasis from specifically physical problems to those that involve intellectual activities, emotional adjustments and social adaptations. It still remains common to have the child considered in terms of specific phenomena. As in a previous generation there was stress upon excessive cigarette smoking, today there is a fear of too great fondness for liquor or for movies. There is, however, a larger degree of attention given to juvenile habits that are deemed undesirable. The viewpoint has altered in that today many habits are viewed as subversive of the finest growth of the personality of the young, and not merely as unpleasant for the family or the community. One need but enumerate such difficulties as sleeplessness, worry, excitement, lack of concentration, school failure, mental depression, fear and anxiety, irritability and tantrums, sex delinquencies, disobedience and cruelty, to appreciate some of the new elements entering into consideration of child behavior. Fidgetiness, lying, stealing, vagrancy, fantasy, frequent change of occupation, mental retardation, drug addiction, the epilepsies, have become as significant in the welfare of

children as the more readily noted difficulties of speech, sight and hearing or even such seemingly physical behavior as scoliosis, enuresis, pavor nocturnus, chorea or syncope.

The layman no longer regards behavior as accountable on the theory of original sin or inheritance from ancestors who cannot voice their own defense. Pediatricians are inadequate in their medical service if they dwell entirely in the seclusion of somatic diseases. They must take cognizance of all behavior—asocial, social or antisocial. They should treat all aberrant forms of reaction—and all diseases are reactions in and through living. All human behavior, particularly in its juvenile phases, represents a totality of reaction. Is the pediatrician to treat the child who reacts or merely some of his reactions?

This leads me to ask: what is a child? From the common viewpoint it is merely an offspring in relation to his parents. On the other hand, a child even as a physical entity has primary relationships in terms of physical activity, intellectual life and social adjustment construed as community values. Is a child merely to be viewed in terms of his body? Is he an agglomeration of muscles, viscera, glands and nerves? Is he merely an anatomic organization? Patently, anatomy, in itself, does not constitute the essence of the child or there would be no distinction between the cadaver and the functioning organism. The child may be definitely viewed in terms of his anatomy but his physiology is of far greater significance. Is he, however, merely a congeries of physiologic systems organized to sustain the vital processes? The distinction between hypothyroidism and hyperthyroidism indicates the significant difference between the physiologic activity and the mere anatomic presence of an organ. Absence of the thyroid gland, with its resultant cretinism, evidences one phase of physiologic dependence upon anatomic presence. Functional stability of the heart is vital to the total welfare of the child but the presence of a congenital cardiac anomaly that necessitates a compensatory modification of function does not always disturb the total equilibrium of childhood. Consciousness of the cardiac dysfunction may be more devastating than the lesion and its



physiologic deviations. The child obviously is more than his basic somatic structure.

Is the child to be viewed entirely as mind? Are the primal instincts, his emotions, intelligence and imagination, his capacity for mental activity, whether in learning or adaptation, to be regarded as his totality? Patently, instinctive activity is inherent in child biology but his social existence involves regulation of the instincts for practical living. Mere knowledge of the intelligence of a child does not give a picture of him any more than knowledge of the size of his hand gives sufficient information concerning his capacity to hold a job. No one can gainsay, however, the important part that mind plays in the total configuration of child life. Psychic life involves the instinctive, emotional, intellectual components, but as interacting rather than mutually exclusive factors.

Laying aside for a moment the biologic manifestations of a child in terms of anatomy, physiology and mental activity, there are very definite social values which constitute an essential part of child reactions in health and in illness. Some people refer to the soul of the child as though it were a thing apart from his mundane life. No one would assume that religion, social sentiment and spiritual values represent the summation of child life, even though they cannot be disregarded as vital factors in his living. The social bases of his personal welfare are deeply founded in the physiology and psychology of the child. He is what he is by virtue of the totality of factors entering into his unitary completeness. His entire personality is created by the internal interaction of all that he is in response to all that he touches in his environment and to all of the environment that impinges upon him.

The child is a unit in function. His activity is the expression of his total reaction as a biologic social being. The child, as an abstraction, has very little practical value to physicians save for the purpose of establishing theoretic norms of height, weight, metabolic activity and the like. Each child is a unit in his own constitution, in his inheritance, in his environment. His life depends upon the unified reaction of all the endogenous and exogenous factors that affect him. There is an inter-

relationship between a large variety of seemingly unrelated elements. Whatever behavior he manifests represents the integration of all his functions. One cannot differentiate his physical and mental systems as though they were acting in parallel or possessed independent activity. They are only phases of his total personality. Walking, talking, dreaming, creating are not phenomena isolated from responsive social living. One may consider the large variety of behavior patterns of childhood from any one of several angles but their meaning depends upon their relation to the possibility of securing harmony in environment. Abnormal behavior represents disharmony whether from causes primarily somatic, psychic, or social.

Abnormality in structure or in function carries with it no certainty of type reaction. The behavior response is unpredictable because neither structure nor function constitutes the sole dominance of the being. The vital organism is not essentially behavioristic and so a definite stimulus does not always determine the identical response. I may illustrate this by considering myopia. There are, of course, varying degrees of myopia but one cannot predict the behavior reaction of a child even when the degree of myopia is known. One child, for example, with a moderate degree of myopia, will complain of headaches, fatigue, refuse to study and perhaps play truant. Another child, with the same degree of visual difficulty, will apply himself more assiduously, strive to attain high standing and regret school vacations. A third child thus handicapped will do more school work than is necessary, but will seek an outlet for his activities by recourse to stealing, or by day dreaming or creative work along lines involving little visual application. The behavior variations of these children depend upon elements of personality that are not bound up in the myopia. Amputation of a thumb takes from a child something more than 2 phalanges. Who can prophesy his response to this mutilation? It may totally disorganize the harmony of living for a child, particularly if he has aspirations to be a baseball pitcher. Removal of tonsils is not to be regarded as a slight physical operation without effects upon the total reactive organism of childhood. One need but think of the unexpected and unpredictable post-

tonsillectomy neuroses, phobias, choreas and the like as evidence that the operative procedure involves more than a physical trauma. One cannot even state what a child will do if his foot is stepped on; much depends upon when, where and by whom.

The interaction is very observable in the reactions of children to psychic distress. The physical reactions of fear, rage, love and the like are manifest in a vast variety of somatic expressions which greatly disturb normal adaptation. The hysterics of childhood, the psychogenetic epilepsies and the psychoneuroses bear witness to the involvement of the somatic systems as an expression of diminished harmony in the total psycho-physical life. Fear produces disturbances of muscular and glandular function, and functional disorders of the heart or gastro-intestinal system cause fear reactions. The adrenal gland affects and is affected by psychic reactions of frustration and anger.

I have stated that intelligence is not the main factor in the organization of child life. No one denies that the possession of a high or low intelligence quotient is a matter of importance. The intelligence quotient, however, does not reveal qualities of leadership, persistency, industry, artistry, humor or social adaptability which are vital constituents of personality. The behavior reactions of a moron, an imbecile or a superior-minded child are not to be evaluated entirely in terms of their intelligence levels. One cannot predict immediate reactions nor later success in life with certainty, utilizing the intelligence quotient as the sole basis for judgment.

Intelligence is bound up to no small degree with many physical states. The absence of a thyroid gland, for example, makes the intelligence level exceedingly low. Presence of deafness or mutism appear to lower intellectual potentials. Hemiplegia, mongolism, chorea, encephalitis affect mental potentials. Fear of injury or personal harm may interfere with the adequate employment of existent intellectual potentialities. The relation between social adjustment and intelligence involves more than a definite level of intellectual capacity. Social harmony in contacts is not assured by keen mental powers of learning. The relation be-

tween character and intelligence involves the consideration of non-intellectual components. In the last analysis, intelligence is relative. A child may be intellectually capable in one school and intellectually incapable in another school having a much higher level of pupil selection. Intellectual adequacy or inadequacy, however, in so far as it is a part of the total expression of juvenile behavior, is definitely less important than emotional stability.

The emotional life of a child is conditioned by inherent mechanisms upon which I need not dwell at this particular moment. It is sufficient to say: "The motor trend of the emotion dominates conduct." The child is a reacting organism. Doing is more important than thinking. I shall not discuss motivation or life goals because it would require too much time to explain the psychodynamics of Freud, Jung, Adler and others who dwell upon the psychogenetic domination of human activity. Nor shall I stress the conditioning theories popularized by Watson or the foundations of an approach through the social psychology of McDougall or Trotter. I wish to be more generic in my approach to the emotional drives, regardless of their nature.

To put one's self across in the community and to gain personal satisfaction is especially significant for child life. One may recognize potent emotional factors entering into personality as they grow out of definite instinctual qualities of life. There are the emotions that grow out of the ego, the herd and the sex instincts. The feeling tones, whether in terms of pleasure or pain, sinlessness or sinful guilt, in so far as they affect the person as a unit and as they affect his relations to the groups with which he must live, deeply affect his total reactions. The sexual instincts affect both the ego and the herd trends and are inherent in the somatic and psychic organizations of the child. These emotional components vary in their activating forces in accordance with their dominating presence in the conscious and unconscious life.

In childhood, the pressures upon the ego are most severe. The entire scheme of habit formation for social living involves a modification of the ego trends and the restriction of native biologic impulses in order to attain a



social harmony without too great a sacrifice of the ego. The entire training period of childhood therefore involves tremendous molecular readjustments of the personality. There are involved coördination of the brain and muscles, the cerebrospinal, sympathetic and parasympathetic systems, the intelligence and emotions, out of which grow the variety of attitudes and powers, including the ability to make adaptations, the willingness to do so, and finally, the determination to secure the harmony most productive of satisfaction in every realm of action. The child seeks security and love, companionship and harmony in terms of an internal sense of success and achievement with an increasing amount of independence and power in external relations.

I am emphasizing that the child as a unit possesses a physical life, an emotional life, and an intellectual life but that these are thoroughly interacting and merge finally in an expression of social life through which self-realization must be secured. Child behavior always has meaning; it is symptomatic; it has purpose. The feeling of inferiority, as stressed by Adler, may arise because of somatic inferiority or by reason of some failure of adjustment in the home, school, on the playground or in the factory. The reaction to inferiority may be theft, bullying, emesis, truancy, etc. Conflicts within the individual child, due to clashes of personal and social demands and desires, are bound up in innumerable reactions that are at one time dominantly physical, intellectual or emotional. Only for purposes of discussion may one focus attention upon some specific phases of the child, because in evaluating and interpreting child behavior it is essential to synthesize whatever has been analyzed in order to grasp the behavior as total reaction. Multiple causation must not be ignored as the outgrowth of life patterns and reactions.

The child is born a biologic unit and his biology involves, of course, psychology. The very facts of conception, parturition and lactation indicate that the child is likewise *ab origine* a social unit and his social adjustments are inherent in every phase of his physical well-being. The physical animal depends for survival upon social existence. The declining infant mortality rate demonstrates this fact.

If one discusses moral well-being, one patently is viewing the child as a social unit. This requires the consideration of the child in terms of his efficiency, human compatability and general adaptability in a dynamic environment. This involves recognition of the individual personality of the child. Consideration of juvenile morals, however, involves judgments concerning his behavior in relation to the ideas, opinions, judgments, sentiments and mores of a community. Right and wrong are not inherent in biology. They are not patterned in cerebral structure nor in endocrine function. They are outgrowths of organized social life. Abnormal behavior is therefore only a reaction type that is not accepted by communal judgment. Judgments, therefore, concerning the goodness or badness of childhood, or of specific activities, habits or conduct trends, are in terms of socially determined scales and these are relative rather than absolute. The efforts of the child to make adjustments in terms of his physical capacities, his intellectual potentials and his emotional systems, bring about behavior that is viewed as asocial, social or anti-social according to time and place considerations. Society by mandate, regulation, tradition or taboo creates its code by which it seeks to preserve the mass with little thought of the individual. An adult world attempts to secure juvenile conformity by pressures of education, government, and religion. Each age produces new conflicts of the older and younger generations and, as a result, codes of morals are changed. Childhood is subject to the flux of its age.

It is obvious that social and economic status, general and familial, plays a definite part in the integrated functions of a child. One views the child as a whole only when his wholeness involves himself in his setting. Even here the integration of his functions include what he is seeking to do to his environment and what his environment is seeking to do to him. And indeed one may add that his integrations involve also his reactions to the communal estimations of himself and his responses to the reactions of various communal groups to his efforts at special social participation. The inherent biology of a child varies as an instrument of stimulation and response under conditions as

found at home, at school, at church, at play and at work.

I have said sufficient to indicate that the pediatrician must learn to view the child as a whole rather than to pass quick judgment upon his behavior. One recognizes the effect of fatigue upon behavior as well as the modifications of conduct due to the prodromes of contagious diseases. The physician appreciates that profound alterations of behavior may result from a large variety of physical causes. I need but refer to club feet, birth traumas, blindness, convulsive seizures, poliomyelitis and encephalitis. There is a vast distinction between causation and concomitance. A syphilitic child may steal but that does not prove etiologic relations any more than the coexistence of diabetes and wanderlust, tuberculosis and masturbation, flat feet and tantrums or endocarditis and lying. Where one thinks in terms of the possible causes of school failure, delinquency, homosexual practices, mental diseases or physical inadequacies, the pediatrician must shift his viewpoint so that he views the child as an integrated personality. The physical sequels of diseases are not limited in their effects to the specific organs that they may involve. Faucial diphtheria may damage the kidneys; intestinal typhoid produces delirium and even psychoses; encephalitis may completely transform a personality from a socially acceptable type to one that is so dangerous as to require permanent institutional care. The symptomatology of numerous diseases involves more than the somatic manifestations of the underlying physical processes. Why, for example, does one child respond to a mild fever with headache, malaise, disobedience and tantrums, while another child evidences increased activity, marked volubility, together with submissiveness and a general acquiescence to parental and medical requests. These differences in behavior are determined by the total functions of the children. The countless deviations of children from a theoretic norm depend upon their totally integrated reactions. The whole child, for example, has a disease even though the main systematology appears to be localized. Treat the child, is almost a pediatric slogan.

Health in children has wide connotations. It is not to be regarded merely as the absence of

defect or disease. Physical perfection in itself is not a rational goal of life and the full attainment of remedial work on children does not guarantee completeness of living. Fulness of life is a positive characteristic and is more than being full of life. I have shown that anatomy is subordinate to physiology; that physiology conditions psychology; that psychology fashions social reaction and that social reaction determines morals. This does not mean that these elements are segregated in the personality of children. To the contrary, they constitute such an interconnecting mechanism that the child can be considered as a unitary being only by recognizing the continuous interweaving of these factors in and upon his personality. The whole child is more than the sum of his constituent parts. The health of the body, mind and spirit is resolved into what Williams defines as "the quality of life that renders the individual fit to live most and serve best".

The integration of the child calls for a larger degree of attention by the pediatrician because it enables him to interpret the child as a biologic-social unit. He cannot practice modern pediatrics intelligently without an appreciation of his part in guiding and forming juvenile characteristics. He is not a dispenser of drugs nor only an adviser of sunlight, fresh air and an adequate dietary; he is a source of ideas of child training, a guide to useful habit formation, a counsellor on human relationships, an authority on mental hygiene, and preventive medicine. As a scientist he reveals the art of living and reconciles it with the theoretic scientific basis of life. His contact with homes with children, with parents, with school and with the community give him a tremendous advantage in approaching the problems of the juvenile population. His major medicosocial service is attainable, however, only when he sees children as individuals and as parts of a communal organization. He should grasp the idea that the child oft-times is in conflict with the regulations and the adult rules of life, but ever is seeking to find satisfaction in the enjoyment of his inherent biologic demands and urges, while endeavoring to function in his world with the least internal conflict. The pediatrician has a prominent rôle as physician and specialist, friend, guide and coun-



seller in influencing the integrations of the child. To interpret the protean world to a child and to interpret the child to his many-sided world is a social pediatric function whose integrative value is paramount for fostering a socially adjusted life with a harmonious growth of personality and an effective individuality.

#### DISCUSSION

*Dr. Julius Levy (Newark):* We cannot let this very brilliant and philosophic talk go by without some comment. For many years, those of us who have known Dr. Wile have known him as a genius for bringing together the many thoughts and ideas that are brought out from time to time and giving them a logical basis, a sequence, and an orientation which is often lost in this busy world.

I think one of the great contributions Dr. Wile is making today to pediatrics, and particularly in the field of mental hygiene and psychology, is this insistence that the ideas that are brought out from time to time, and the emphasis placed on certain statements or viewpoints, are merely single reflections of some general idea. One of the great dangers in medicine has been that in every generation we act as if somebody had rediscovered the cause of all things, and we wildly follow one idea, forgetting everything that has been said for the previous hundred years only to be brought up short by a thorough student and shown that there is no need of neglecting all that has gone before.

I think there is a particularly important lesson in Dr. Wile's approach to this question. One hesitates to use the word practical after Dr. Wile's profound elaboration of this problem, but those of us who are more simple in our work adopt very fully Dr. Wile's idea that when children are brought to us for anything at all there is a magnificent opportunity to try to understand fully the child and the family environment. I know that the pediatrician who has permitted himself to grow into something more than an infant feeder has found his greatest encouragement, his greatest influence, in trying to help children to adjust themselves better to their environment and to help mothers to make this adjustment easier by understanding their children.

Another important point is Dr. Wile's casual reference to the great number of lay organizations that have developed an interest in the child. There is a group that is very well intentioned but whose familiarity with children is only from yesterday and they make one phase of child life dominate the whole field of child care. You know it is very easy for a Viennese to come here and, by tickling the intellectual palates of our women, to be readily invited into the homes of America, and by properly engineering newspaper publicity made to appear that he has discovered the whole secret of child management and child care. Child care has another duty; that of giving the proper place to many of these new ideas.

Dr. Wile has made a brilliant contribution and we are certainly very much honored in having him here.

*Dr. Stanley Nichols (Long Branch):* I have always said that men who understand children should lead in this field of work and Dr. Wile, as any one will confirm who has sat at his feet, has gone into the child mind and outdone the psychologists. Anyone who can should go up to Mt.

Sinai Hospital at 3 o'clock on Wednesday afternoons and see his work in progress. You will never do so without learning something that will be of value in your practice. The subject is so large that we pediatricists stand in much the same relation to it as the general physician does to the pediatricists. We are as the blind leading the blind, but perhaps we can get one eye open if we apply ourselves. The simpler adjustments in family life we can carry out. I sincerely hope that the committee's recommendation, of having a course in this state, will be carried out so that all practitioners may take a course in children's mental adjustments.

In the matter of keeping this subject in the hands of medical men, the question immediately arises—How many men can we furnish in this state to keep the child guidance clinics going? At the present time there are not enough such doctors. We have psychiatrists running child guidance clinics and they often approach the problems, not as Dr. Wile does, to integrate the child, but as a neurologic or mental problem. When we refer the child to such a clinic we are likely to get a neurologic report rather than some definite recommendation as to how we shall solve the family difficulty. If we had more pediatricists interested in this field, such as the members of the committee that Dr. Levy is serving upon, who would give more time and attention to that subject, we could have a system of state family adjustment clinics to make such studies and recommendations, as well as men who, in private practice, would solve the more difficult problems as Dr. Wile does in his private practice in New York. We all know that it is a question of educating the mother after we have first studied the situation. We often wish that we could do what they do in unhappy marriages, and put another mother in her place, because that sometimes seems to be the only solution.

*Dr. Samuel Stalberg (Atlantic City):* Dr. Wile's work appeals to me as a general practitioner, especially as he approaches the subject, not so much from the philosophic or psychologic standpoint as from that of the general health of the child, and the general diseases which may assail it. Dr. Wile's work is especially valuable because of the fact that child delinquency and crime have been on the increase, and I think no greater work has been done in the realm of pediatrics than that of Dr. Wile in the last few years.

*Dr. F. I. Krauss (Chatham):* I might quote my views in the form of a paradox, in saying that this question is harder than it seems and yet not so hard as it seems. When one listens to Dr. Wile one feels very inadequate at first in his approach to the subject, but on second thought it is not so hard because 99% of it is common sense and the other 1% for the general man is technical knowledge. Our greatest difficulty in private practice is to teach the mothers that children are entitled to a certain amount of liberty. From the moment the child is able to toddle around, after the first year has passed during which the child is the tyrant of the family, this child must conform to what the parents want it to do, and as soon as it begins to interfere with their liberties and desires, discipline begins; whereas, discipline should have begun in the first few weeks of life. It is usually delayed until the damage is done and then the conflict arises in the child's mind as to how to adjust itself to the social status. I always emphasize to parents that they shall give the child

such liberty as is compatible without interfering too much with social adjustments, and when the child must be disciplined or corrected in any way let the punishment fit the crime; consider it from the child's viewpoint, how the child reacts, and whether the correction is justified from the child's standpoint. Usually that helps a great deal in giving the mother an idea how to handle the child. Our greatest trouble, of course, is with the first child or only child of the family. By far the best thing is to have several children in the family so that the children can work out their social adjustments as they go along.

I am glad that Dr. Wile brought up the subject of fear—fear following operations, particularly tonsil operations. We speak of these as *minor* operations. I regard them as *major* operations. A description of the way the anesthetic is given, the approach to the hospital, etc., are very important factors in the history. How many times have we seen a child refuse to eat after an operation for weeks and weeks; or a child who is fearful of going to a doctor or to a hospital, fear of the ordinary hygienic things which must be done. I think these fears carry over into adult life and turn many people away from the legitimate medical profession. There are people who still remember the fears they acquired of doctors and hospitals when they were children.

I feel that doctors as a whole do not need to know all the various technical treatments which psychology evolves. Let us approach it from a common sense standpoint, remembering our own childhood, our own complexes and fears. Most of us have had some experience in bringing up our own children, and by putting yourself in the child's place you can help the mother, and the child indirectly in its whole future life.

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## MEMORIAL TABLET TO DR. O. H. SPROUL ERECTED BY THE HUNTERDON COUNTY MEDICAL SOCIETY AT GLEN GARDNER

### Address at the Unveiling Exercises

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JOHN F. HAGERTY, M.D.,  
Newark, N. J.

It is a great pleasure to take part in a meeting of the Hunterdon County Medical Society in this lovely section of New Jersey. I am not a stranger in these parts, having become familiar with this and surrounding country during my apprenticeship with the late Dr. Donohue, of New Brunswick, whom many of you remember. He had occasion to come out this way frequently on professional work, and came often, too, to Finderne, nearby, where there were always to be found good horses, and those of you who knew the doctor well can recall what delight he took in having well bred

stock. I remember a team of well matched sorrels, each nearly 16 hands high, which he used to drive here and to Princeton, Kingston, Somerville, Cranberry, and other places, and what immense pride and satisfaction he experienced in driving this handsome pair, and what admiration they aroused as they went champing proudly by. We have advanced rapidly since those days in methods of locomotion. Distances formerly thought great are now considered slight, and we are able to accomplish a great deal more since the advent of the automobile, but those who were really fond of horses must often regret their passing.

I had the good fortune, too, to meet while on the Bellevue Hospital Staff, Miss Alice Schenck, who was on the nursing staff, daughter of one of your much respected and venerable physicians of a generation ago, and enjoyed visiting this lovely representative of the old fashioned doctor. He was then well advanced in years, small and frail looking, with snow white hair, and was very kindly and affable.

I did not have the good fortune to know well Dr. Sproul, whom you are honoring today, but recall seeing him at the state society meetings, where his dignified and courtly manner made a great impression on me, as it must have on all the younger men. It is a splendid thing that you are doing—reminding future generations of the fine, noble characters who represented the medical profession in former days and whose lives of industry and sacrifice and self-denial endeared them to the people, who respected and revered them because of their goodness and helpfulness. These were the men to whom the present generation of medical men are indebted for the high and proud position they occupy in the public esteem, and which they secured not so much by scientific attainments as by their indefatigable labors and the character of their lives. They accomplished much because of the high regard they had for their sacred calling and love for their fellow-man. It was of such men that Holy Scripture speaks when it says: "Honor the Physician for the need thou hast of him; for the Most High hath created him. For all healing is from God and he shall receive gifts from the King. The skill of the Physician shall lift up his head



and in the sight of great men he shall be praised."

Times have changed and the types of physician have also, of necessity, changed. The methods of doing things today are very different, and this is reflected in the manners and customs of the present day doctor. But, while less personal and more business-like, there are still, on the part of the majority of physicians, the same ideals of service, as shown by the longer time spent in preparation, greater intensiveness in study and the wonderful results being obtained. Just as in manufacturing and business, older methods have become obsolete and newer ways, looking to rapid and larger results have come into vogue, so, in medicine, we are endeavoring to secure better results by sanitation, hygiene and prevention, as well as by more direct and intelligent ways of combating disease. In this respect, no one at all familiar with the efforts of our Boards of Health, both local and state, can fail to be impressed by the active and intelligent campaigns against disease and to make living more healthful and comfortable. The commendable altruism of the physicians of a former day may not be so much in evidence, but while this may be a matter of regret the altered financial condition of the laborer and the tradesman has become responsible for such change and no injustice will result. At the same time, constant, scientific efforts, highly altruistic because of the consequences, are being waged against the causes of disease, resulting in the prolongation of human life and under more favorable and happier circumstances than ever before. One of the most interesting features of the recent annual meeting of our state society was a recital of the work of the many agencies of our state looking to the prevention of human suffering and the conservation of life.

Unless one has given thought to the subject, he will have little conception of the debt of gratitude due to scientific medicine; to the accomplishments of those giants of the profession who have succeeded in wresting from nature the secrets of disease and made of scourges and pestilences that formerly ravaged and devastated the earth, only unpleasant memories. And, most surprising thing of all, is the fact that these wonderful achievements were ac-

complished so recently by men whose life work was not ended when many of us here today had commenced the study of medicine. Time will not permit detailed reference to these epoch-making discoveries, but we may quote Dr. Osler, in his comment upon the blessings of anesthesia, antisepsis, and bacteriology: "Search the scriptures of human achievement", he said, "and you cannot find anything to equal in beneficence the introduction of these agencies, a short half century's contribution toward the solution of problems of human suffering hitherto regarded as eternal and insoluble." We have ceased to wonder because of the daily application of the principles we have learned and the marvelous results being accomplished in medicine and surgery, yet I may remind you that Dr. Keen, of Philadelphia, who, happily, is still alive, records that he heard the first obstetrician of his day say that "any man who opened the abdomen to remove an ovarian tumor should be indicted for murder", and but a few years ago the same distinguished author said that the abdomen, which was formerly forbidden ground, might almost be called a play-ground in which surgeons disport themselves to their hearts' content; always, however, in the perfection of some new technic or the performance of some needed operation. He tells us, too, that when he began the study of medicine, about the same time as Dr. Sproul, whom you honored this morning, there were no laboratories of physiology, of histology, nor pathology, nor any instruction given in diseases of the eye, ear, nose or throat, orthopedics, diseases of children or gynecology. Very remarkable, indeed, are the advances that have been made in the last generation or so, and it would be heartening and profitable had we the time to dwell upon these accomplishments, but it will always be the glory of the nineteenth century that medicine was then placed on a rational, scientific basis, affording scientific methods of study which will ultimately lead to the unraveling of the mysteries of all infectious diseases and their conquest, and which will redound to the credit of medicine as a blessed and altruistic calling.

I had the great pleasure of attending the last session of the American Medical Associa-

tion as a Delegate from our State Society. It is a great privilege and honor to participate in the transactions of that splendid body of physicians representing all parts of our great country and see how earnest and zealous they are in their efforts to elevate the standards of medicine and medical men, and thus help the people whom they worthily represent. It is very inspiring to witness the business-like way these sincerely interested men deal with the many perplexing problems that arise and always with the thought in mind of justice to the rank and file of the profession. Many important questions of public policy, affecting the profession, hospitals and the laity were considered and judiciously disposed of. The Veterans' Hospital Bill and the Veterans' Pension Act, both of which were regarded by the majority as unwise and iniquitous legislation, were unanimously disapproved, such action being telegraphed to President Hoover, who referred in his veto message to having been influenced by the House of Delegates. But perhaps the most forward looking suggestion of some time, and which will have a profound influence upon the relations of physicians to the sick poor and the conduct of hospitals, came from the pen of William Gary Morgan in his inaugural address. In brief, this was to the effect that the expense of caring for the sick poor in every community should be borne by all the people of that community, and should be met by direct taxation; that the physician was no more responsible for, nor bound to relieve, the illness or misfortune that might come upon his neighbor than any other citizen; that in all semi-public hospitals the laboratories and operating rooms were to be kept up to the highest point of efficiency but that all use of such laboratories by the well-to-do, or all services rendered to such people by members of the staff, was to be paid for, and paid to the physicians rendering such service; and, further, that in all purely public hospitals no charges for services should be made, and physicians or surgeons would have no right to serve if charges for service were made and retained by the city. While such propositions might seem revolutionary and contrary to the long established traditions of the medical profession, a little consideration and reflection upon the many in-

justices perpetrated upon medical men will convince one of their fairness and justice. A hopelessly ill person, or an acutely ill person, without means is a charge upon his or her community and not solely upon Dr. Smith or Dr. Jones. If medical men choose to give their time and services, as they always have and will, to the purely public hospital, the city must see that proper provision is made for rendering such care as is necessary, but that only those who are totally unable to pay shall be admitted, and that no attempt be made to help pay the expense for conducting such hospitals by charging for services of the members of the staff. In short this address proposes to distribute the burden of medical care and surgical skill of the sick poor upon the whole community instead of upon the physicians and surgeons, and to prevent the abuses, prevalent in all cities, of the fairly well-to-do profiting by the appointments and laboratories of the semi-public and public hospitals and of the time and services of the attending staff.

Consideration of this subject brings us naturally to another, very much in the public eye—the high cost of medical care—concerning which I may repeat what has often been said, that increased fees of physicians and surgeons are not alone responsible for the present agitation. My own impression is that extravagant habits of thought and living on the part of nearly everybody have contributed most to the present cost of illness. The era of prosperity immediately following the World War, with the unprecedented rise in wages of the laborer and the ability to purchase, too often on the installment plan, comforts and conveniences formerly possessed only by the well-to-do, has engendered in everybody habits of living up to and well beyond their justifiable needs. And, just as everybody today possesses automobiles, radios, frigidaire, and the like, so everybody when ill must go to the hospital, and only the very poor will not insist upon having a private room with special care day and night. Naturally enough, hospitals have increased in number, in elaborateness of construction and appointments, until many of them are little less palatial than the finest hotels. Every possible improvement in laboratory equipment and therapeutic appliances must be installed and.



rightly so, the executive, clerical, nursing, intern and culinary forces have to be enlarged, with resulting rise in overhead expenses, and so the cost has mounted until it has become a matter of investigation and, even, reproach.

Perhaps no one concerned is entirely free from some responsibility in the matter, but I still feel that hospitals, for the successful fulfillment of their work, need only be well constructed, fire-proof, providing light and air, and clean rooms with capable nursing force, and the very best possible provision for good surgical work and medical investigations. This does not include rooms *en suite* nor suites for relatives and friends, nor even rooms with baths, which bath rooms are very rarely used by the patient and are too often receptacles for soiled clothing. Nor is it necessary for everybody when ill to go to hospitals. Many such people can be properly cared for at home, and minor surgical operations properly performed there.

Greater judgment should be exercised in advising x-ray and other laboratory examinations and the routine, repeated blood and other examinations are expensive and very often unnecessary. Not every abdominal pain calls for a G. I. series, nor every slight injury to head or limbs for x-ray pictures to determine the presence of fractures. Greater caution, too, should be taken in advising surgical procedures. Not every joint pain calls for removal of teeth or tonsils, and not every abdominal pain spells chronic appendicitis or diseased tubes. The truth is that the art of history taking, physical examination and diagnosis is being neglected and too frequent resort is made to laboratory and other aids which add materially to the cost of illness. Too many procedures are advocated, which often are of no avail. Transfusions, for instance, will replace blood that has been lost and supply needed elements to prevent further bleeding, and are wonderfully helpful and life saving procedures, but they will not cure septicemia nor pernicious anemia, nor septic peritonitis, and failure of any one method often brings other methods into disrepute. X-rays and radium are, at times, valuable aids in treatment but will not cure large uterine fibroids, nor cystic or colloid goiter;

much less will violet ray or other lights, which are rarely helpful. Indeed, while there may be a modicum of good in light therapy and physiotherapy, their indiscriminate use is not only needlessly expensive but often results in the loss of good chance of recovery by other methods.

The nursing problem has become an acute one. We are well aware that the hours of duty are being shortened while the wages have increased, and often the presence of a large number of private nurses has, in my experience, lessened the inclination to work by the ward nurses, and many patients are compelled to employ special nurses in order to receive proper care.

The matter of fees is one upon which it is quite impossible to draw any hard and fast lines. In general, charges should be based upon the character of the illness or surgical operation and the position, civic or otherwise, of the patient; in other words, in proportion to the responsibility and the skill involved. It is my impression that excessive fees are charged by some specialists for operations where there is no great risk or skill required.

But, after all, in discussing the high cost of medical care, let us not forget that many people boast of the number of operations they have had and of the fees they have paid. Many people seem to prefer the services of high priced specialists, partly, at least, for the pleasure of boasting about it; others, having only minor operations insist upon having nice rooms, which are kept filled with choice flowers, and which they gladly pay for because of the impression made upon visiting relatives and friends, and not infrequently at the expense of the physician when the question of payment is raised. All of which bears out my contention that extravagance has much to do with the cost of medical care.

Please do not think that I am indicting the specialist or reflecting upon the general practitioner or surgeon, but there are practices which have crept into our methods which have a material influence upon the question at issue and which are often overlooked by those considering the subject.

## THE COUNTY SOCIETY\*

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When informed that I was supposed to give the annual address to this group, our secretary told me that the last 3 Presidents had written on the history of medicine in Burlington County and he thought it advisable for me to change the subject to something like "Golf as a Hobby for Doctors". I must say that this was a good suggestion for I should have felt much more at ease in talking on that subject, but once in a while my mind does strike upon more serious topics and, in thinking over what might be appropriate to say today, my thoughts have continually come back to one idea and that is: What does our County Medical Society mean to its members? Is it an organization which lends its weight to the advancement of our profession? Are our meetings a place where we obtain helpful advice, not only from the papers read but from social contact with our fellow physicians? Are we working in harmony, as a society, for improvement of the medical care of the citizens of Burlington County? Many other such questions have been passing through my mind.

Please do not censure me too much if what I have to say does not agree with some of your thoughts or if some of my conclusions are wrong, but I do have a concern that our society shall keep in step with medical progress and that Burlington County may be recognized as a place where young medical men may come for general practice, and even for the specialties, knowing they will find in our group men of the highest caliber and who will not let petty jealousies and criticisms obstruct good work.

It has always been said that medical men are poor business men. In one sense of the word, I believe that is a compliment. The business world is a world of competition, of cutting prices, of under-selling and under-bidding, of patenting new discoveries, of criticizing competitors' products, and so on. Fortunately, all

of these practices are frowned upon by the medical profession. They are discouraged and stamped out to a large extent but I see many signs which tell me there are still some who do not abide by the Code of Ethics of our society. There are men in our county who severely criticize, to their patients, the work of a fellow physician. Will it not leave a much better impression with the patient if the physician in charge says nothing about the previous care a patient has had, but rather lays particular stress on careful history, physical examination and treatment? I cannot help feeling that this type of friction has driven many of our citizens to cultists and to quack cures. They get tired of hearing one thing from one physician and something different from another. The public is rapidly becoming medically wise, and in order that we hold its respect we must keep abreast of the times and cease petty insinuations and criticisms.

I should like to digress here just a moment and mention a subject which has made me feel that possibly the members of our society are not assuming proper leadership in the matter of preventive medicine. For the past 2 years our state society, through its county societies, has been putting on a Campaign of Diphtheria Immunization. It seems to me that this can best be accomplished by every physician in our county inquiring about and making a record of every child that comes to his office, as to whether this immunization has been carried out and, if it has not been done, to strongly advise it. The same is true of vaccination. There are entirely too many children of school age in our county who have never been vaccinated, and each one should be considered a menace. It was the custom, 30 years ago, for each physician to automatically vaccinate every child under his care when 4 to 6 months of age, and the vaccination was almost included in the obstetric fee. I am convinced that the present laxness is largely due to us, as physicians; we have not brought it to the attention of the parents, and they naturally have overlooked it. It would not be necessary to put on campaigns if we individually assumed the responsibility which is ours and ours alone.

I have already mentioned that some business practices are frowned upon by the medical pro-

\* (Presidential Address to the Burlington County Medical Society, Nov. 12, 1930.)



fession and justly so, I believe, but there are factors in a doctor's life which should be strictly on a business basis. These factors have to do with the commercial aspect of our profession, namely, fees, collection of bills, etc. Much has been written lately on the increasing cost of medical care. The American Medical Association is now engaged in collecting figures on the cost of such care and by so compiling statistics to be able to draw some definite conclusions. There is an excellent article in the Journal A. M. A. of March 29, 1930, dealing with the cost of medical care from the point of view of the general practitioner. The factors discussed are: (1) The traditional opposition to discussion of the so-called commercial aspects of medical practice. Dr. Holdbrook here points out that as a rule our patients seek medical and surgical advice without any definite understanding of the obligation incurred. Tradition has taught the patient that he is not expected to approach the physician as to cost of his services. He feels that the only rational solution of this difficulty is to break away from illogical traditions and establish franker business relations with our patients. (2) The traditional custom of charging fixed fees. Here Dr. Holdbrook makes a plea for individualizing charges with particular consideration of 3 factors—the physician's qualifications, the patient's ability to pay, and the service rendered. (3) Inconsiderate hospitalization. (4) Unnecessary consultation of specialists. In my mind, there is no doubt but that the general practitioner is still the essential force in the profession. With him should rest the decision as to whether patients should be hospitalized or should consult specialists. These decisions mean much more to the patient than we realize and we should not be too hasty in our advice.

In speaking of hospitalization I want to mention a force that has entered our medical life during the past 2 years, which I feel is as big an influence in establishing harmony of thought and purpose in our society as anything we could hope for, and that is our County Hospital. Those men who are giving their time to this institution, which was so heartily endorsed by our society, are reaping untold benefits and pleasure from their work; they are on a much more friendly basis with their asso-

ciates, they are able to see the type of work that is being done in the county, and, above all, are exhibiting a type of work which we should all be proud of. The laymen of our county are also appreciative of the advantages of this hospital and are more than pleased with the treatment received. I wish I could prevail upon those of our county society who either are not on the staff or who have not sent patients to the hospital that they make an effort to learn more about the work that is going on in this institution, for it is a real privilege to have this hospital so close at hand.

Our membership is 54 and our average attendance at the county meetings for the past 2 years has been 18 to 20. This is not a good record and indicates either that our programs are not sufficiently attractive to call out our members or else that our members have lost interest in organizing and working together. Organization and professional contacts are important; therefore, let us show more activity as a group.

This has been somewhat of a rambling paper but has been stimulated by an honest desire to see our society grow.

In conclusion, I would sum up by saying: Let us attend our county meetings with more regularity. Let us bring to our meetings topics for helpful and interesting discussion. Let us work in harmony and forget petty disagreements. Finally, let us give to our patients more time and thoughtful advice.

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## MEDICAL SERVICE OF THE FUTURE

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In spite of the marvelous growth of the medical sciences and the abundance of well trained doctors, preventable and curable diseases cause an appalling proportion of the prevailing mortality. According to Dr. H. L. Willett, Jr., Assistant Director of the Gorgas Institute, they account for 61% of the total deaths. The corresponding amount of unnecessary sickness must be tremendous. The conditions surely present a momentous problem challenging all classes entrusted with the

welfare of mankind. They testify to the gross deficiency of the prevailing competitive form of medical practice, a heritage from primitive ages.

This astounding inability of man to derive commensurate benefits from modern medicine lies in the need of the proper organization of the separate health agencies. As no less an authority than Dr. Ray L. Wilbur, Secretary of the Interior, has repeatedly declared, it is a matter of universally distributing the facilities for the best possible medical care. For this, the only practical method has been found to be a free service. In its incomplete form it has been developed in the out-patient departments and the wards of hospitals, and in industrial and health clinics. In its complete form it has functioned notably in our navy and army. To our president and our representatives in Washington is furnished this very medical service.

That free, universal medicine is no new or fanciful idea is shown by an editorial upon "Free Health" in the "Survey" of May 13, 1911, nearly a score of years ago. It is quoted in part, here:

"Free education was once considered radical, but it was followed by compulsory education, and with compulsory education illiteracy became extinct among the native born. This free, compulsory education was neither charity nor justice, though free schools began as charity. It was protection, for revenue only, for society saw that ignorance was costly and dangerous.

Free health is now radical, but it will come and compulsory health will follow. No child is now allowed to be ignorant, whether its parents are willing or unwilling; but disease is both more contagious and more dangerous than ignorance. Conversely, health is more precious than knowledge, both to the individual and to the community. The tenement father who sees his boy go through grammar school and die of tuberculosis would rather have a live son than a wise one. The wages of unskilled labor in the tenements do not allow health but education is given free. Which would any father choose for his child? Which should humanity, or policy, first give? Public health is quite as important to the community as public educa-

tion, and we shall some time have free doctors as well as free teachers, leaving the private doctors, like the private schools, for the few who can afford and prefer them.

There are signs of this in the increasing number of doctors already in official service in our health departments and elsewhere. Twenty years ago we had city hospitals and city poor physicians. Now the public roster shows tuberculosis inspectors, tenement inspectors, food, milk, and drug inspectors, school medical inspectors, school nurses, bacteriologists, and even school dentists; and we might add as health officials the smoke inspectors, public bath house keepers, and the playground directors. Many cities pay for public lectures on sanitation, hygiene, feeding, and flies. The social value of public health is incalculable, and the public is realizing this."

These thoughts penned almost 20 years ago are not only true but singularly timely.

In most countries of Western Europe various systems of gratuitous medical service have been in operation for some time. Not one of them, however, as was observed by Dr. Winslow, Professor of Public Health at Yale, in his tour of investigation as member of a commission of the League of Nations, is compatible with our institutions and traditions, because they savor too much of class legislation. They represent diverse insurance schemes, designed primarily for the poor. They resemble somewhat the cheap contract service rendered fraternal societies in many of our larger communities. Because of being incompletely organized, they retain the evils of individualistic, competitive practice and lack the advantages of coöperative medicine.

In an article published in the American Magazine of April 1916, entitled, "Better Doctoring for Less Money", Dr. Richard Cabot, internationally renowned in the realms of both medicine and sociology, showed the impossibility of the majority of the people obtaining the full blessings of scientific medicine so long as they depended upon the single practitioner. He explained that there were 2 reasons for this: first, the need of close coöperation and team work; and second, the prohibitive cost of competition of unorganized individual special-



ists whose skill has become more and more indispensable.

In 1916, also, there was held at Washington a conference on social insurance called by the international association of Industrial Accident Boards and Commissions. So important were its proceedings that they were published in full by the Bureau of Labor Statistics of the United States Department of Labor, in Bulletin 212. About one-third of the sessions were devoted to the subject of sickness benefits and insurance. The speakers included representatives of employees as well as employers of insurance companies and societies, government and private health and welfare agencies, besides private and public health doctors of medicine. They were almost unanimously agreed that health insurance was needed. They favored an organization corresponding to the British Panel System in which the privilege of selecting one's physician from among competitive individuals is permitted and in which are introduced intermediary agents or referees of the insurance companies or the friendly societies to supervise the work of the physicians, because the doctors, though paid by the insurers for services rendered to the insured, are tempted to be too partial to their patients, whose good will they naturally strive to keep. This particular system, which had not then been thoroughly tested, has since proved to be incompatible with scientific medicine. It will probably be superseded by a free public service.

During the World War fully organized medicine maintained the health and fitness of the naval and military personnel at such a level that for the first time more combatants were killed by projectiles than by diseases. Surely the sudden and vast recruiting of the regular medical corps of both the navy and the army subjected such a health system to a most severe and thorough test. Since their members, most of whom were enrolled temporarily for the duration of the war and had been unaccustomed to discipline and coöperation, did cope so successfully with the problems of mobile forces exposed to the greatest hazards to health and vigor, certainly such an organization would insure the adequacy and efficiency of a permanent body with its in-

herent *esprit de corps*, ministering to the relatively immobile civilian population.

Since the war the necessity for such a free health service has become imperative. The medical sciences have been growing so fast as to increase the demand for genuine specialization. But many specialists, self-appointed, have not complied with any recognized standard. They have pursued their profession independently and unrestrainedly. They have unduly encroached upon the province of the general practitioner, disrupting his practice and increasing the expensiveness of medical diagnosis and treatment more than ever. For, in general, the division of labor without organization is bound to add to the cost of its product and, besides, because of waste and friction, competition in a public necessity cannot fail to do likewise. So these unbridled members of the profession require control and regulation by incorporating them with physicians, in general, into a service like that of the navy.

Since the war, furthermore, private and public health agencies have so multiplied and expanded as to decrease materially the available profitable work for private physicians. Moreover, with the decline of the prestige of regular doctors struggling for a livelihood, multifarious healers have invaded the field of medicine. For these reasons specialists, particularly upon whom falls the burden of most charity service in hospitals, have been compelled to demand of their paying patients excessive fees. Some have adopted the business principle of charging all that the traffic will bear. They were abetted by the recent period of unprecedented prosperity. Its collapse, however, and the return of a normal or sub-normal economic state will accentuate the urgency of coöperative public medicine.

So, it is but natural that the present chaotic status of medicine should give rise to much dissatisfaction. The poor, who are dependent upon hospital service, suffer from want of home treatment. The rich complain about the extortionate fees of the experts, whose time and energy are partly consumed by charity patients. Middle class patients, blindly groping for succor, are embarrassed most of all by the prevailing disorder and confusion because they are paying dearly for the poorest treatment.

Among doctors, too, the conditions of practice today are unsatisfactory. The medical man begrudges the surgeon his large fees, especially since many are derived from operations such as he himself performed while serving as an intern. He is vexed by the anomalous state of a profession in which hand work pays much better than brain work. The honest scientific doctor is disgusted or worried by a widening divergence between the intelligent pursuit and the actual practice of his profession. He resents the success of the dishonest practitioner who lures gregarious mankind by his sheer artfulness and his ostentatious appurtenances; not from envy of him but from sorrow for the beguiled and the benighted, denied the advantages of scientific medicine. In this day of quick transportation and instantaneous communication the conscientious physician deprecates the fact that the *practice* of medicine continues to lag so far behind the *theory* of medicine. Why should it have taken at least 15 years to educate the practicing physicians in the correct use of diphtheria antitoxin, one of the few specific internal remedies? Also, why should the mortality from appendicitis have actually increased during the last 5 years?

The flagrant inadequacy of medicine has been fearlessly decried by a few leading medical men. They have piqued many of their fellows, smug and complacent, who like rabid members of trade unions have forgotten that every part of society exists for the good of the whole, not the whole for any one part. Dr. William Mayo, one of the founders of the far-famed Mayo Clinic, publicly declared that there were in certain aspects of medicine too much salesmanship and too little humanity. He stated what Dr. Cabot implied in his article, to which reference has already been made, that the ward patient under the care of the regular hospital staff usually received better treatment than the private room patient attended by his individually selected doctor.

In the issue of Harper's Magazine for September 1929, Dr. Joseph Collins in his contribution, "The Patient's Dilemma", showed that nowadays patients had to do considerable shopping among doctors before they could obtain personal satisfaction. He asserted that the root of the evils of medicine today lay in

money. It is true that the vital perplexing questions he raised can be answered only by the deliberate institution of a free, ready medical service.

Since, after all, the subject of proper medical care is sociologic, laymen have quite naturally undertaken to solve this baffling problem, than which there is not one more important. Sociologists have rightfully denounced medical practices. Their studies and opinions, however, have not been widely diffused. The first business man openly to find fault with medicine's unreasonable status was Edwin A. Filene, the Boston merchant. To the January 1930 Graphic Survey he contributed an essay in which he condemned the inefficiency and waste of unorganized medicine, into which he has gained a clean insight through his personal relations with numerous employees about whose happiness he has been much concerned. He advocated the injection into medicine of business methods such as have made possible so many beneficent industrial and philanthropic organizations of this progressive era. Without business profits, however, nothing can introduce into medical practice such efficiency and humanity as a free system patterned upon that of the United States Navy.

Is it not evident, therefore, that at this stage in our civilization a system of free public medicine is urgently needed? In civilian life progress in medical economics has obviously lagged far behind the advancement of medical science. In the navy, however, it is not so. As soon as the people are aware of this fact, like representatives in Washington, they will adopt such a service as the Bureau of Medicine and Surgery of the Navy, whose function is to preserve the fitness of each of the personnel for his duties and to restore any of them to duty as promptly and as fully as possible. This means the practice of preventive medicine primarily and of curative medicine secondarily: without question a sensible purpose. With this, contrast civilian practice, in which, on the one hand, the patient procrastinates in seeking relief from his affliction and, on the other, the physician seems too busy prescribing for ailments to take much interest in keeping people well. As a matter of fact he is rarely hired to do so. So long as the civilian doctor is paid



by the visits he makes instead of by the time that he spends, he will be tempted to neglect the most important phases of medicine, namely personal hygiene and public health.

How does the medical corps serve the naval personnel? Every applicant for the navy is, of course, thoroughly examined by one or more medical officers. Every member is re-examined on frequent occasions, whenever he is promoted or transferred, as well as when ill or injured. All officers undergo at least one regular physical examination every year. So, every one must be found physically fit for his specific duties, whatever they may be or whenever they may change. Every member must be protected against infection with any communicable disease in which appropriate vaccination is effective. Whenever anybody appears to be unable to perform all his duties on account of illness or injury, he is immediately referred to the medical officer on duty. The medical officer must ascertain, if possible, the cause of the complaint and decide what should be done for the patient. If the patient be disabled, he is kept under the care of the medical department and his name is posted upon the sick list until he has been pronounced fit to return to duty. Possibly he requires admission to the hospital, where he receives intensive study and appropriate treatment.

The naval surgeon, moreover, takes a natural interest in everything in the environment of the personnel that may affect health. He is responsible for sanitation of the ship or the shore station to which he is officially attached; in particular, the clothing, food, quarters, working conditions, and athletics; in general, everything which may impair health, jeopardize life, or endanger limbs. He instructs members of the crew in first aid and in hygiene. He is a true teacher quite worthy of his title of doctor.

The assignments of naval surgeons depend much upon their rank, which is determined chiefly by their knowledge, skill and experience. The younger men are attached to smaller vessels or stations in charge of all medical matters or to hospitals or larger stations as assistants to their superiors. The older surgeons fill administrative positions as commanding or executive officers in hospitals, in the

offices of the central bureau at Washington, or in the Naval Medical College. Those in the intermediate ranks are usually engaged in active medical and surgical practice. They are encouraged to become expert in at least one specialty of medicine. In contrast to the civilian doctor who renders whatever menial personal service his patients demand, the naval surgeon as he rises in rank is entrusted with greater responsibilities and accordingly relieved of the simpler routine duties which are carried out with more zest by his juniors. He aids those below him, he is aided by those above him, ever ready to cooperate. He is able to practice his profession intelligently, because he has no occasion to bluff or to guess. He does not need to hurry; he must do his work with diligence and precision, since he is supervised and checked both directly by those associated with him, and indirectly by those at the headquarters of the Bureau of Medicine and Surgery. If his efficiency be impaired by sickness or fatigue, he is temporarily relieved of duty. Since, as he attains the higher ranks, the scope for his energies increases he is happy to pursue his profession for its intrinsic gratifications, whereas the civilian physician aspires to attain a competence so as to escape from the servitude of his patients or to relinquish the private practice of medicine entirely for something more congenial and less arduous, like business or banking or politics. To medicine alone the naval doctor dedicates his whole career and gives to his fellow men the full benefit of his mature judgment.

The naval doctors are stimulated to maintain a high standard by means of constant affiliation with their colleagues in 2 ways: through rivalry with those of equal rank and through supervision and control by those of superior rank. That they do maintain a quality of practice above that of civilian physicians is attested to by many civilians serving with them during the World War. That fact is tacitly acknowledged, furthermore, by the American Medical Association, which admits all naval medical officers to fellowship unconditionally, automatically by virtue of their commissions, whereas fewer than half the civilian physicians can meet the necessary pro-

fessional qualifications for admission to fellowship. Finally, Congress has thought well enough of the medical corps of the Navy and Army to vote its members the right to free service. Surely at a time when congressional fact-finding and fault-finding committees or commissions are investigating almost everything there is no need of additional evidence of the superiority of such a medical service over competitive practice.

Such an organization as the Bureau of Medicine and Surgery of the Navy can be applied to civilian practice either by expanding the present public health department of any commonwealth or by creating a bureau of public medicine incorporating that department, the welfare department, industrial accident board, municipal and county hospitals, and whatever private hospitals may be required to furnish a state-wide service. It would constitute a complete public system of medicine with free professional service for all established residents of the state. It would be composed of full time medical officers of different ranks, according to their respective ability and experience, working together in and about hospital bases with the necessary auxiliary personnel, so well organized as to insure suitable discipline, supervision, and control of each member, and to stimulate interest and effort by rewards of promotion and prizes. The hospital units would be coördinated by a central state bureau with the requisite administrative divisions. One of the most valuable functions of such a medical corps would be the keeping of permanent health records of each patient, in fact of every citizen, to facilitate and expedite the successful management especially of urgent cases. Whereas in the present chaotic state of private competitive practice many people often do not know where to obtain proper medical attention or cannot afford it; government medicine, furthermore, would not only furnish the best possible service, but would also readily guide the patient, though suffering and bewildered, to the source of optimum treatment.

Under this proposed complete system of co-operative medicine, since the individual physician would necessarily be subservient to the whole, a patient's choice of doctor would be

absolutely precluded. And so it has been for decades for those ward patients who have availed themselves of the superior service offered by the larger well organized hospitals where the best scientific medicine has been practiced. And so it must be from the very nature of modern medicine, founded upon the rapidly growing and expanding sciences for which team work is the *sine qua non*. Today this freedom to select one's physician actually redounds to the disadvantage of the patient, who does not know where to procure the best advice, because of the obsolescence of the genuine family doctor, ever ready to serve the child or the grown-up, day or night, and the absence of any successor to aid or to guide. On account of the gregariousness of mankind, this selective privilege has been responsible, according to estimates of drug salesmen calling upon physicians, for about 20% of the doctors doing about 80% of the medical and surgical work. This has certainly encouraged, on the part of the busy popular practitioners on the one hand, haste, carelessness, and fatigue with consequent inefficiency; on the other, rank commercialization of medicine and heartless exploitation of patients. It has fostered the practice of the art, or easier phase of medicine, and stifled the scientific or harder. It has nurtured much bunk, humbug, and license; it has suppressed much honesty and truth.

Since, finally, the welfare of the people is a primary function of a democracy, only the government can supply a universal need which, it is generally admitted, private agencies have signally failed to meet. This utility is undeniably of prime importance to every one, young and old, unborn as well as born. For health has now become more essential to success and happiness than education. Public education has long ceased to be socialistic. So, surely, public or state medicine cannot be rejected as undemocratic. Moreover, no longer to be regarded as untenable is the application to their own purposes of such an excellent medical organization as that of the Medical Corps of the United States Navy.

In conclusion are quoted 4 pertinent sentences from the inaugural address of President Hoover.



"In public health the advances of science have opened a new era."

"Many sections of our country and many groups of our citizens are suffering from diseases the eradication of which are mere matters of administration and moderate expenditure."

"Public health service should be as fully organized and as universally incorporated into our government system as is public education."

"The returns are a thousand fold in economic benefits, and infinitely more in the reduction of suffering and the promotion of human happiness."

### SOME SOURCES OF INFORMATION AND MISINFORMATION IN CARDIAC DIAGNOSIS\*

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The clinician of today depends a great deal for his diagnosis on the so-called modern methods of precision that the laboratory offers, one of the most important of which is roentgenology in the study of cardiac conditions. A

greater accuracy in diagnosis, is the concern of the present contribution.

The amount of information the clinician derives from a roentgenologic plate or series of plates in the study of a gastro-enterologic or pulmonary condition is invaluable. The findings are fairly positive and sources of error are rather negligible. Not so with roentgenologic plates of the heart. The possibility of distortion of shape and configuration of the heart shadow on the film by improper position of the patient in relation to the tube is obvious. The attempt to obtain the actual size of the

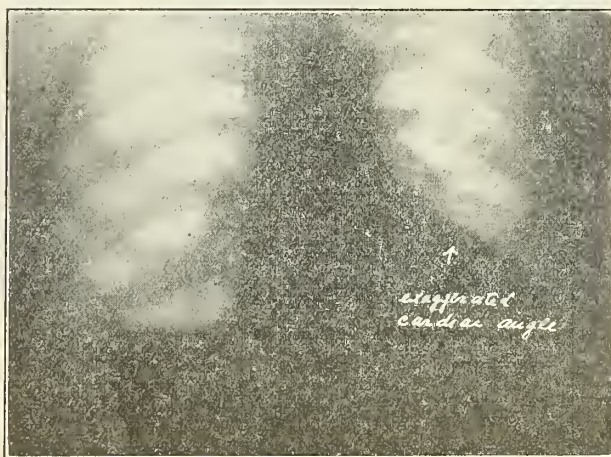


Fig. 1. Short stocky patient with a high diaphragm.  
Heart shadow is of a distinctly aortic type;  
cardiac angle very pronounced,  
aortic knob prominent.

cardiac roentgenogram taken at a distance of 6 feet is supposed to offer the clinician a tremendous amount of information regarding the actual size and the normalcy or abnormality of configuration of the heart as a whole or of its various parts. How much this laboratory aid, as generally carried out, helps to inform or misinform the clinician in his search for

heart by the plate at 6 feet distance, or by orthodiagraphic tracing under the fluoroscope, is not always rewarded with an accurate result, as we shall point out subsequently. There are various factors that influence and frequently vitiate the result.

It is not within the scope of this contribution to go into minute descriptions of all the possible errors, shortcomings, and methods of their correction, in the roentgenologic study of

\* (From the Department of Cardiology of the Newark Beth Israel Hospital.)

the heart; we shall limit ourselves to a few phases of the subject, its difficulties, sources of error and methods of overcoming them.

When one attempts to familiarize himself with an object whose surfaces are rather of a complicated nature, he will look at it from every side and angle. A picture of one surface will by no means suffice to give a comprehensive idea to the shape and configuration of the object, and yet, this is precisely the situation with roentgenology of the heart or of its various parts when we attempt to draw a conclusion from study of one film only. The fallacy of this method is obvious. The heart occu-

thus varies with the respiratory phase of the diaphragm and lung movements. It is also influenced by many other extrinsic factors, as we shall point out presently. When the diaphragm descends during inspiration the heart not only assumes a more vertical direction but also changes from a somewhat levo to a more mesial position. While doing this, the heart also performs a rotary motion, thus bringing various parts of the heart that are usually seen *en face*, into a more profile position. Furthermore, on inspiration, the expanded lungs exert a great deal of pressure upon the surrounded heart and bring about an appreciable diminution in its



Fig. 2. Same case as in Fig. 1 in deep inspiration, diaphragm on descending carries heart with it; cardiac angle markedly diminished; aortic knob less prominent.

pies the greater part of the mediastinum. It is fixed chiefly at its upper part to the tissues covering the spinal column by the large vessels. The major or lower part of the heart is suspended from above and is practically freely movable. Below, it rests on the more central part of the diaphragm, which structure undergoes upward and downward excursions during the 2 respiratory phases. On either side, it is surrounded by the lungs. The position and condition of the surrounding structures necessarily greatly influence the shape and apparent size of the heart. The position of the heart in the mediastinum, as well as its configuration,

transverse diameter. This is particularly true in the case of a thin-walled heart of dilatation.

The aortic shadow, its size and width, as well as its intensity, play a great rôle in cardiac diagnosis. Here, too, there is much to be desired in greater accuracy of interpretation of the shadow produced on the film or on the screen. The usual report of the roentgenologist reads as follows: The aortic arch is widened, or the aortic knob is prominent or accentuated. Now, as in the case of the heart proper, the size and shape of the aorta, too, will vary not only with intrinsic changes within the aorta, but with numerous alterations in



position of the surrounding structures, particularly by the condition of the spinal column.

While studying a cardiac plate, the question whether the heart is that of a mitral or aortic type stands out foremost. The mitral heart, because of the enlarged left auricle and somewhat more prominent pulmonary artery, causes a diminution in the cardiac angle—the angle between the upper vascular part and the lower cardiac part of the left border, which brings about a straightening-out or even a convexity to the left, instead of the concavity usually found. In the aortic heart, on the other hand, because of hypertrophy or dilation or both of

tation, brings about a straightening of the left border, thereby causing a marked diminution and occasionally a complete obliteration of the cardiac angle, thus producing a typical picture of a mitral type heart where no mitral lesion exists. The same prevails in the case of the tall ptotic individual whose chest is long and diaphragm low, thus permitting a very vertical position of the heart even without the inspiratory phase. (Fig. 3.) And it is particularly in these cases where an erroneous diagnosis of a mitral lesion is frequently made. On the other hand, one may err by being reluctant to make

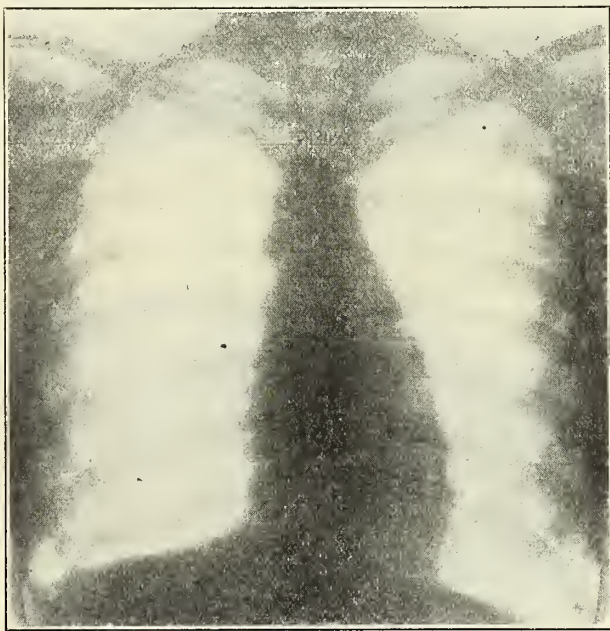


Fig. 3. Definite ptotic heart. Long and mesially placed.

the left ventricle, the above mentioned angle becomes exaggerated and the concavity markedly increased. It is on the basis of these changes in the contour of the left border that the roentgenologist bases his opinion as to the type of heart he is confronted with.

Changes in configuration of the left border can be and are frequently brought about by extraneous factors that are not given sufficient consideration, and the interpretation is therefore frequently misleading. As stated above, on inspiration, due to the descent of the diaphragm, the heart assumes a more vertical position. This, coupled with the incident ro-

a diagnosis of mitral heart when bearing in mind the fact that this status ptoticus is conducive to a pseudo-mitral shape, and thus may miss the diagnosis; particularly apt to occur in the case of a silent mitral stenosis.

In case of the short, stocky individual with a short chest and with the usually high diaphragm, the reverse is true. The body of the heart proper is forced by the high diaphragm upward, while the upper shadow, made by the large vessels, is fixed; in this way the cardiac angle becomes exaggerated, and an impression of an aortic configuration is produced.

*Methods of overcoming diagnostic difficulty.*



Fig. 4. Heart in a ptotic patient. Very suggestive of a mitral configuration. There was a systolic murmur over apex. No other signs of cardiac difficulty.

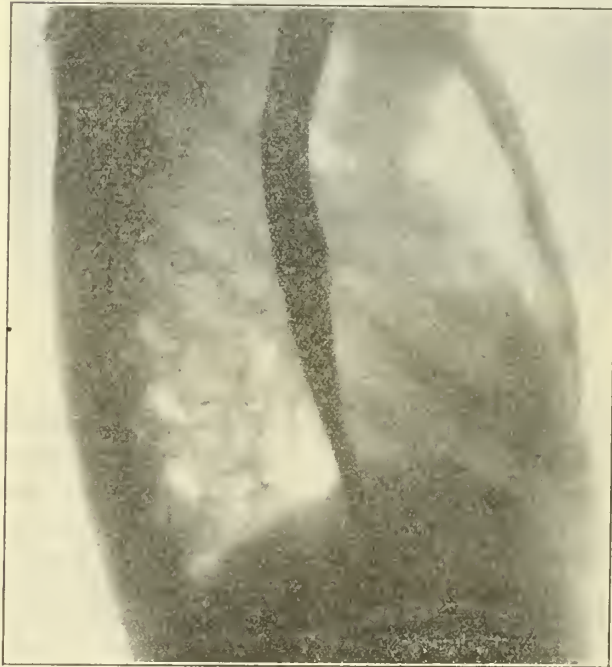


Fig. 5. Same case as in Fig. 4 in lateral position. Esophagus shadow not indented, showing no enlargement of either left auricle or right ventricle.





Fig. 6. A definite case of mitral stenosis with its typical configuration.

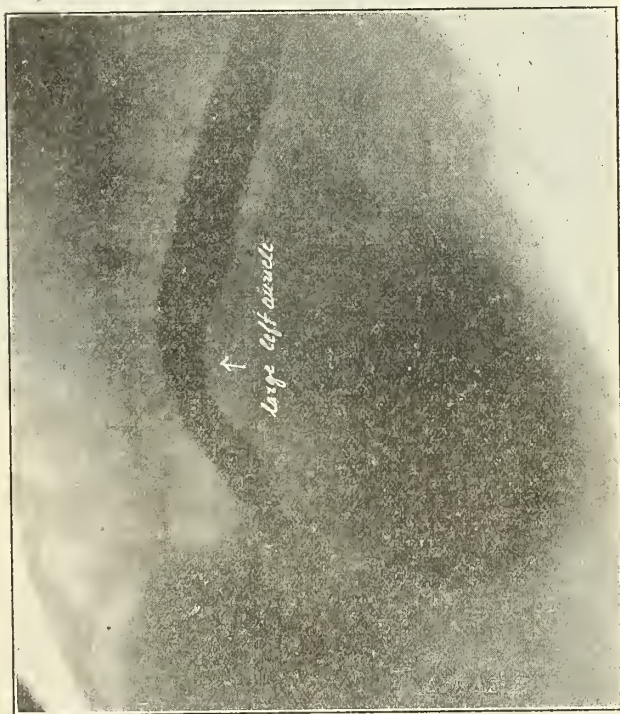


Fig. 7. Same case as in Fig. 6 in lateral position on ingestion of barium paste. Upper half of retrocardiac part of esophagus is definitely indented and displaced toward spinal column by the enlarged left auricle.

In the questionable aortic type, the method is simple. Have the patient take a deep inspiration. In the true aortic heart where the increased cardiac angle is due to hypertrophy of the left ventricle the particular configuration will persist; while in the pseudo-aortic configuration produced by high diaphragm, the heart will straighten itself out, and the cardiac angle will diminish as soon as the diaphragm descends. (Figs. 1 & 2.)

In the questionable mitral heart the solution is not so simple. Here, inspiration will not help us. On the contrary, it exaggerates the

tion and asked to swallow a tablespoonful of barium paste; when a marked indentation of the retrocardiac esophagus by the bulging left auricle can be clearly made out. This procedure establishes the diagnosis of a mitral lesion beyond any doubt, and is an invaluable aid in cases of questionable mitral lesion where the only positive sign is that of a systolic murmur at the apex. These murmurs, as we all know, frequently puzzle clinicians as to their significance, and absolute diagnosis of an organic functional nature is frequently impossible. (Fig. 7.)

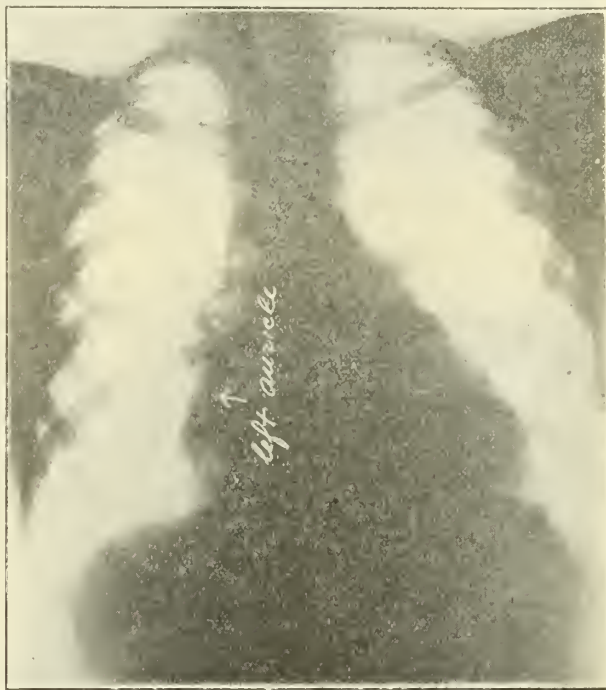


Fig. 8. Case of a young boy with mitral stenosis. The left auricle is definitely seen on the right side of the heart shadow which is more intense at this point because of the super-imposition of the 2 chambers.

condition. So we must resort to another method. The esophagus is located immediately behind the heart in the lower part of the mediastinum. It courses downward in an almost straight line. (Fig. 4.) Now, in the case of a mitral lesion, some degree of enlargement of the left auricle takes place to the left but chiefly posteriorly, thus encroaching upon the posterior mediastinum and particularly upon the retrocardiac part of the esophagus. The patient is placed in the right oblique, or even in the right lateral, posi-

We might add here that occasionally the enlarged left auricle may assume such enormous proportions as to reach over to the right border of the heart and produce a paradoxical situation where the left auricle makes part of the right border of the heart. The Roentgen shadow will show 3 curves, instead of the normal 2, making up the right border of the heart; the lower curve being due to the right auricle, the middle curve due to the left auricle and the upper curve to the ascending



aorta. Such a third curve is often mistaken for an aneurysmal dilatation of the root of the aorta, or for a sacculated pericardial effusion. This mistaken diagnosis can also be obviated by the barium ingestion in the right oblique position where the auricular hypertrophy can be definitely made out. Occasionally such an enormously enlarged left auricle will produce physical signs of a sacculated pleural effusion in the right interscapular space. On doing a paracentesis one will naturally aspirate blood

oblique position. The former will appear wider as compared with the latter.

All conditions that change the anteroposterior relation between the ascending and descending parts of the arch will influence its apparent width. One of those conditions is kyphosis or scoliosis of the spinal column. In kyphosis the greater convexity of the spine carries the descending part of the arch to a position almost immediately behind the ascending part. Such an arch, looked at *en face* will, naturally,

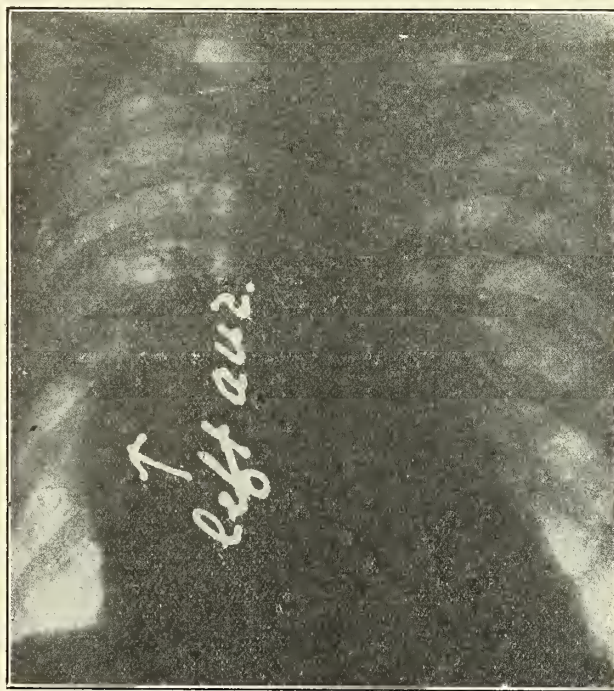


Fig. 9. Severe case of mitral stenosis. Left auricle projects beyond the right border of the heart.  
Case proved by autopsy.

and make the diagnosis of an hemorrhagic pleural effusion. (Figs. 8, 9, 10, 11.)

As to roentgenology of the aorta, anatomically the arch runs first upward, then backward and then downward, so that the ascending part of the arch is anterior to the descending part. It is easily conceivable that anything that will bring the descending part of the arch more anteriorly will cause a widening of the shadow of the arch as a whole on the screen. This is made more clear when we think of the perspective view of a flat surface, in one instance looked at *en face*, in the next, in a more

look extremely narrow. In scoliosis the descending part of the arch assumes a more lateral position in relation to the ascending part, and thus the shadow of the arch as a whole projected on the screen or film will appear much wider than it really is. There are many other factors that will influence the apparent width of the shadow of the arch. Anything that will flatten out the rotundity of the arch will cause its widening without bringing about a real change in the size of the aorta. A large substernal thyroid pressing down on the arch will do it. Likewise a very high diaphragm,

crowding the heart up against the arch, will do the same. Thus, we see that taking the width of the arch shadow as seen on the film, as an index of the real intrinsic condition of the aorta, may be frequently quite misleading.

However, the question arises, is it the measurement of the width of the arch that is of diagnostic importance, or that of the cross section, or the diameter of the lumen of the aorta that is of greatest consequence. On careful consideration one realizes that it is the latter that is paramount.

outermost tangential point of indentation caused by the aorta, again by the aid of the orthodiagraph. The measurement between the 2 tangential points minus 2 mm. that represent the thickness of the wall of the compressed interposed trachea, indicates the true width of the aortic tube, which in the normal male adult measures 3 to 3.5 cm. This procedure is known as the Kreuzfuchs' method. (Fig. 12.)

After a little application and practice, it is accomplished very easily and without appreciable loss of time. The additional few min-

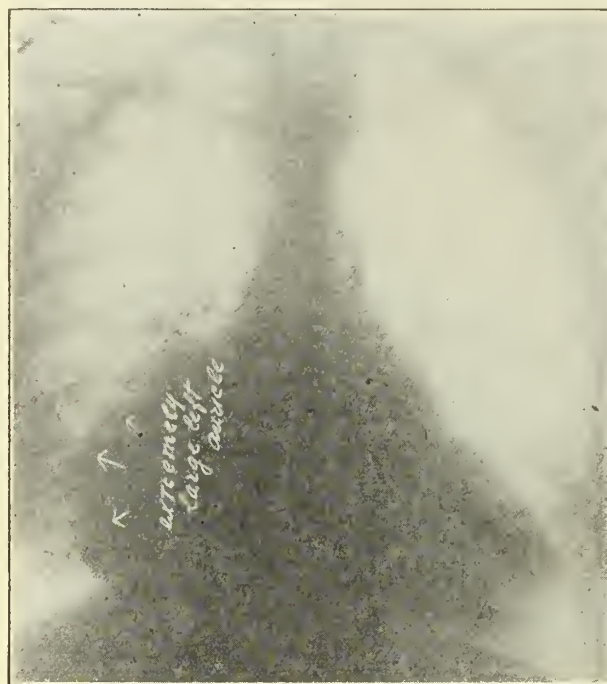


Fig. 10. A most severe case of mitral stenosis. The left auricle bulges out beyond the right border of the heart. Case was diagnosed as a sacculated pericardial effusion, also as a possible tumor. Clinically it gave all the symptoms of a pleural effusion.

We must then endeavor to obtain, either on the screen or on the film, the shadow of the lumen of the aorta looked at *en face*, and then obtain its accurate measurement. This is accomplished in the following way: Place the patient in the right oblique position. Under orthodiagraphic guidance, mark the left outermost tangential point of the aorta. Then have the patient swallow a tablespoonful of the barium paste. The aortic indentation of the esophagus is readily visualized. Mark the right

utes thus spent are more than repaid by the greater exactness of information thereby derived.

We pointed out above the influence of the respiratory phases of the lungs and diaphragm on the contour of the heart. At this point we want to emphasize the fallacy of taking heart roentgenograms in deep inspiration—a practice followed by practically all roentgenologists. We ostensibly attempt to be very exact in the measurements of the diameters of the heart,



yet we overlook the fact, as pointed out above, that deep inspiration will compress the heart, particularly so when the heart is dilated, and thus diminish the transverse diameter by 1 cm. or more. As a matter of fact the extent of inspiratory compression and consequent reduction of the transverse diameter of the heart can be utilized as a means to determine whether widening of the transverse diameter of the heart is due to prepondering hypertrophy or dilation. The hypertrophied heart will suffer little compression while the dilated organ will be materially compressed and thus will under-

Best results and most accurate information are obtained by resorting to fluoroscopy, when the extent of the various changes in the shape and size of the heart viewed from different angles in either of the respiratory phases can be ascertained. The fluoroscope also offers us the opportunity to scrutinize the variation in the contractile power of the heart. The vigor or tardiness of the ventricular contraction conveys a very definite impression as to the quality of the myocardium. If a roentgenographic film is taken, it is best done while the patient holds his breath midway between expiration

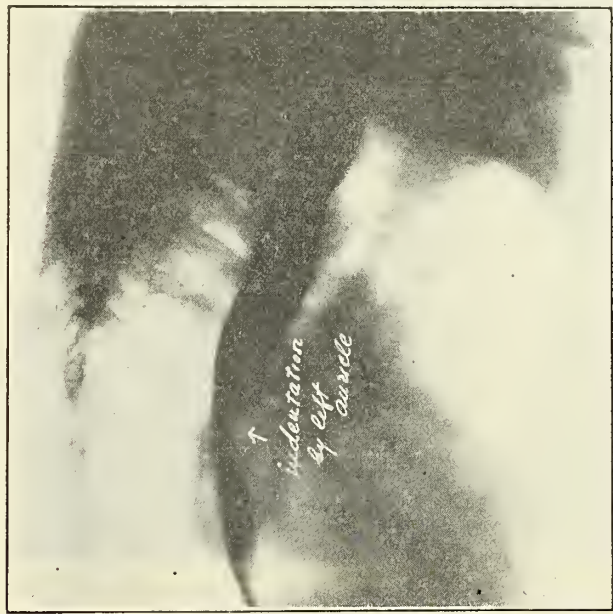


Fig. 11. Same case as in Fig. 10. In lateral position on ingestion of barium paste. Upper half of retrocardiac part of esophagus is definitely indented and displaced toward spinal column by the enlarged left auricle.

go marked diminution in its transverse diameter.

It is obvious that cardiac roentgenograms must not be taken in either extreme inspiration, for reasons mentioned above, or in extreme expiration, as in this phase the higher position of the diaphragm tends to produce an apparent aortic configuration and a false impression of widening. In the case of severe myocardial degeneration, deep inspiration will allow lengthening of the heart and thus frequently obliterate the typical mushroom or bottle-shape of the heart that is of great diagnostic importance.

and inspiration or, to be more explicit, with the patient holding his breath after a slight inspiration. Of course, a film in deep inspiration looks prettier, but then, all know that beauty and accuracy do not always go together. As a matter of fact the film is to be used merely as a means of permanent record.

Fluoroscopy of the heart is really the job of the cardiologist. He should attempt to view the heart under the fluoroscope as one looks at an object under a glass jar. Being most conversant with all shades and phases of various pathologic conditions and congenital

anomalies, he is most qualified to interpret the findings and evaluate the various deviations from normal. Among all the methods at his command, the fluoroscope should occupy the very most important place.

#### SUMMARY

(1) The respiratory phases, by changing the pulmonic volume and diaphragmatic position,

(5) Care must be exercised not to mistake such an enlarged left auricle for an aneurysmal dilatation of the root of the aorta, for a sacculated pericardial effusion, for a mediastinal tumor or, clinically, for a pleural effusion.

(6) The measurement of the width of the aortic arch is no criterion of the condition of the aorta.

(7) The width of the aorta can and should



Fig. 12. Kreuzfuchs' method of measuring the width of the lumen of the aorta. The barium in the esophagus is definitely indented by the posterior wall of the arch. The distance between the 2 tangential points minus 2 mm. represents the width of the aortic tube.

materially influence the cardiac size and configuration.

(2) A low diaphragm is conducive to mitral configuration; conversely, a high diaphragm is conducive to aortic configuration.

(3) Indentation of the retrocardiac part of the esophagus rendered visible by ingestion of barium paste is an important aid in the diagnosis of questionable mitral conditions.

(4) The left auricle may and often does assume such enormous proportions as to reach over posteriorly to the right border of the heart and even project beyond it.

be determined by the measurement of the diameter of the aortic tube which is made possible by the Kreuzfuchs' method.

(8) To properly and adequately visualize the heart and aorta one must not limit himself to the study of a film in the anteroposterior position, but must fluoroscope the heart from various angles in different respiratory phases; also, one must observe carefully the vigor or tardiness of the cardiac contractions.

(9) The fluoroscope is an invaluable aid in cardiac diagnosis in the hands of the experienced cardiologist.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured it:

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, (address above), Newark, N. J.

## COUNTY SOCIETY ADVERTISING

During the past year several articles have been published, one or two in professional journals, the others in secular magazines, urging physicians to advertise or denouncing the medical profession because it does not advertise in the daily press. Quite recently one of the country's prominent evening newspapers scolded us severely for not having aided in wider dissemination of the Coffey-Humber cancer cure, alleging that thousands of lives would have been saved if the profession had joined in the advertising of that marvelous discovery; but, by the irony of fate, that scolding was published in almost exact coincidence with publication of refutation of the Coffey-Humber claims. What a fine spectacle the profession would have made of itself, had it, on the basis of such slight claims, advertised ability to cure cancer.

In so far as our observation has gone, the pressure brought to bear upon the profession by advertising agencies, and the attempts to ridicule physicians for holding fast to a code of ethics that has well served them and their patients for hundreds of years, have been instigated by the "business" proclivities of those who would unscrupulously use an honorable profession for the base purpose of bringing a few more dollars into the paper's advertising office. We have yet to see a medical advertising plan emanating from newspapers or magazines that bears any real evidence of interest in the welfare of the physician or the public.

Some medical societies have engaged in ad-

vertising to the extent of paying for newspaper publication space in which to provide the public with information concerning health promotion or sickness prevention; educational campaigns for the public welfare but not for personal gain, benefit or aggrandizement. Even that sort of advertising has not been unanimously approved, and it remains to be demonstrated that it is wise policy for our county societies, or for any other units of organized medicine.

Our attention has been forcibly drawn to this question during the past few weeks by a proposition submitted to one of our own component county societies. You may observe in the reported proceedings of the Camden County Society, in this issue, that the society "referred to the State Society Welfare Committee a suggestion from one of the local newspapers concerning paid educational advertisements which were to be run in series". To be exact, the proposition was referred to the Chairman of the Welfare Committee, and by him was referred to the Executive Secretary for consideration. We are publishing now our opinion because we fear the same proposition may appear in some other county society, and deem it wise to endeavor to prevent any group from innocently falling for the scheme. The following letter to the Secretary of the Camden County Medical Society will explain the proposition and our views thereon:

"January 13, 1931.

Dear Dr. Buzby:

On Friday evening, January 9, I received as visitors, by appointment, 2 gentlemen who sought my approval of a plan to sell advertising space in a Camden newspaper to the Camden County Medical Society or to individual members of that society. They exhibited the advertising material pre-

pared by a publicity expert in Indiana, together with a list of papers in which such ads have been published, and letters purporting to endorse the ads and the scheme in general. In the course of conversation I was informed that they had asked the county society \$1000 for publishing 26 articles at weekly intervals for 6 months, and that offer having been declined they were seeking 80 subscriptions from members at \$50 each to pay for such publication of said advertisements. They further informed me that you and Dr. Lippincott had refused to support the plan unless and until the State Society gave endorsement thereto, and that you had both advised consulting the Executive Secretary of the State Society.

I discussed the question with them in a friendly manner and stated my personal objections, but promised to think the matter over carefully and without prejudice if they would leave the material with me a few days. I have given the promised careful consideration to this subject, in so far as possible to all of its effects and ramifications in addition to its primary results, and I have to record the opinion that it would be unwise for any county society or individual physician to participate in this scheme.

To the newspaper this is purely a scheme for selling ad space—without even a pretense of interest in physicians or public; a money-making proposition—nothing else.

To the medical profession it is a cleverly worded, alluring proposition to secure publicity without violating the Code of Ethics. I have said that the wording is a *clever* arrangement but I must add that the choice of subject matter is anything but clever. To harp upon the theme that physicians are not promptly or adequately paid for professional services, weekly for 6 months, would be mighty poor psychology—especially at a time when there is so much discussion concerning 'the high cost of medical care'. Furthermore, the only 'indirect advertising' that organized medicine may justifiably (?) engage in is paid-for publication of the benefits which scientific medicine holds out for the public welfare. This proposed advertising does not fall within that classification.

I am returning the documents to the paper's representative, and most respectfully recommend to you and Dr. Lippincott that your county society members be advised to have nothing to do with the scheme.

Thank you most heartily for directing this matter to my attention, and thus affording me the opportunity to become informed about another scheme for separating the hard pressed physician from his hard earned dollars.

Sincerely yours,

(signed)

Henry O. Reik, M.D.,  
Editor & Executive Secretary."

practice, and the Executive Secretary alluded to the suprisingly large number of articles upon that subject that had been published in state society journals in the short period of time between May and October 1930. We are still hoping to find time to abstract those articles, in order that a comprehensive survey of the situation may be laid before you.

Recounting our vacation experiences, in the January Journal, we announced the intention to write later about the National Health Insurance Act of Great Britain and the present status of such legislation in England and in France. We shall reach that point in our travel talk next month, and will in successive monthly instalments quote sections of the English and French laws, together with authentic interpretations of important features, so that you may have an accurate picture of existing conditions.

Meanwhile we must keep an eye on the progress of events nearer home. Legislatures are at present meeting in most of the New England and Middle Atlantic States and we shall not be surprised if some radical propositions appear in several of the larger states. Acts embracing centralized control of practice, in one form or another, were under consideration in more than one state legislative assembly during the sessions of 1929 and 1930. In our own state we had in each of those years to combat an "Act to Control the Practice of Surgery and the Surgical Specialties". Most of the Bills so far presented, whether applying to surgery or to general medicine, have been so *extreme* in their provisions as to kill themselves. But, it behooves us to continue watchful and to study carefully every proposition that is submitted, in order that we may act intelligently, be prepared to support any movement that gives reasonable assurance of benefiting humanity, and to oppose any legislation that experience leads us to believe would be impractical, unworkable, or detrimental to public welfare.

Our first duty is to become well-informed—as thoroughly so as possible—regarding the success or failure of such experiments elsewhere, and concerning measures that have been considered or are being introduced in this part of the world. It is that conviction, i.e., that it is our duty to study this economic question

## MEDICAL SERVICE OF THE FUTURE

Those of you who read the proceedings of the Annual Conference of County Medical Society Secretaries and Reporters, in the December Journal, will recall the amount of discussion devoted to so-called *state medicine*, and you may remember that the Secretary of the State Society gave a brief sketch of the steady advance of governmental control of medical



as scientifically as we would a newly proposed remedy for some bodily disease, that induces us to report upon the progress of events in other countries and to direct attention specifically to projects that may suddenly present themselves for decision. There is an old adage that "where there is so much smoke, there must be some fire". Generally, there is some good reason, some degree of truth, back of or underlying any public clamor that persists for an appreciable length of time. Many of the books and articles criticizing the medical profession and threatening dire consequences if practice is not immediately revised, have been ridiculous, and not a few of them evidently inspired by prejudice, even at times hatred, based upon ignorance or falsehood. Not infrequently a sound basic complaint has been exaggerated and distorted and expanded into an unreasonable protest supported by an illogical argument. But, we must admit that there have been some reasonable complaints, some justifiable protests against harmful procedures that have grown up in and become fastened upon the modern practice of medicine. These abuses must be corrected, and we are confident that none will excel the great mass of honest physicians—90%, at least, of all members of the profession—in applying the corrective, once it has been judicially determined what is wrong and what is the remedy.

Admitting for the sake of argument, that the present state of unrest and of dissatisfaction with medical practice is in some measure justified, let us inquire whether *state medicine* is the proper, the best, or the only remedy. When its proponents have presented their case, we shall be in a position to answer, to argue, and, if necessary, to contend for an honest and just decision. Flat denunciation of any proposed change, especially if the proposition be vague and poorly understood, is futile. If there is anything radically wrong with the customary procedures of professional practice we want to know it. If there is a better method of practice we want to adopt it. If the great benefits of medical science can be more effectively supplied to a larger percentage of suffering humanity; if by a change of procedure we can more quickly wipe disease from the face of the earth; if there is a more rapid, more efficient,

and more generally satisfactory means of bringing about the millennium—for Heaven's sake, let's have it! Whether it be called *state medicine* or by some other euphonious term matters not; to us, "a rose by any other name would smell as sweet".

Asking for information—what is *state medicine*—it would seem wise to direct the query to one of its most prominent advocates. In so far as we have seen, the most logical presentation as yet made of a concrete plan originated with the author of the Bill that was last year before the Legislature of Massachusetts, and with a view to securing for your consideration the best possible statement of the fundamental facts to be embraced in a proposed American system of state medicine, and the soundest reasons in advocacy of such a system, we invited Dr. Gilbert W. Haigh, of Worcester, to prepare for us the paper which you will find under the title at the head of this editorial. Dr. Haigh is a worthy member of our profession, who, in addition to experience as a general practitioner in private practice, has served in the Medical Corps of the United States Navy and he knows whereof he speaks. Here is no "sensationalism", no carping criticism, no threat of punishment for misdeeds or short-comings; here is a plain, straight-forward discussion of conditions unsatisfactory to the profession as well as to the public, and a tempered argument in favor of one method of socializing medical practice. It is constructed by "one of our own", who has given much thought to this very serious problem and who offers what he believes to be the best possible solution.

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#### ADDING INSULT TO INJURY

#### BRAZEN EFFRONTERY OF THE AMERICAN TOBACCO COMPANY

Has your quiet evening enjoyment of the radio ever been disturbed by the raucous voice of the Lucky Strike announcer, informing the world that "Luckies are kind to the throat"? Has your blood *boiled* because of the heat engendered by his slanderous pronouncement that "20,679 physicians have stated Luckies to be less irritating" to the throat and less likely than other brands of cigarettes to induce coughing?

Have your respect for science and love of truth suffered under his deceitful, tricky, distorting use of the language of science to bolster up an alleged scientific treatment of tobacco to improve its quality?

Until recently you might have supposed the manufacturers of "Luckies" had sunk about as far as one could go in the slime of dishonest advertising, but there remained at least one lower level and the company has descended to that stage; and for brazen effrontery it takes the blue ribbon. We do not know exactly what has happened but apparently something transpired to make the company's publicity agent realize that the usual radio talk constituted an insult to the medical profession. In consequence, it would seem, the speaker now occasionally throws out what he probably considers "a sop to Cerberus"; i.e., a gratuitous announcement (in a tobacco advertisement) that periodic health examinations are or should be beneficial, and advising individuals to visit their family physicians at regular periods. Can you beat it? Insult added to injury! Evidently the sponsors of that program believe they can insult and slander physicians *ad libitum*, and then palliate the offense by publicly endorsing a welfare movement that was inaugurated by physicians as part of a disease prevention program. What next?

Quite aside from its offensive character, as viewed by physicians, the Lucky Strike advertising matter is about the worst that the American business craze for blatant, impudent, false, not-quite-provable-lying advertisements has yet produced. Let us analyze the speech that is repeatedly broadcast and the wording of ads now appearing in daily papers like the New York Times and magazines like the Forum; publications that ought to be but are not above engaging in the spread of such deceptive and misleading material.

The statement that 20,000 physicians signed cigarette testimonials may be true, though we doubt it. But, if it be true that so large a number of educated men could be induced to "sign a blank check", the fact must not be overlooked that in this instance the signatures were secured by methods which smack of fraud. While we

feel ashamed of the fact that so many of our brothers proved themselves "easy suckers", the advertiser who procures testimonials through deceptive procedures has little to be proud of or boast about.

The statement—"It's toasted! Everyone knows that heat purifies and so *toasting* removes harmful irritants that cause throat irritation and coughing"—is made to appear as evidence of a scientific fact, but is, in reality, nothing but a jumble of words covering 3 alleged facts which have no true relationship to one another. For instance: "Everyone knows that heat purifies." We might retort that everyone knows also that heat *destroys*. What reason is there to suppose that heating will purify tobacco? We may assume the answer would be that heat is destructive only when applied in an intense form, and that purification attends upon the use of heat in moderate degree. Very good, but if by "purifies" it is meant to imply that microorganisms—disease producing germs—are destroyed, we respectfully submit that a considerable degree of heat is required for that purpose, repeatedly applied in the case of spore-bearing germs, and that the heat of *toasting* is *not sufficient* to accomplish the purpose. A very simple experiment can be tried in the kitchen. Would any bacteriologist testify that *toasting* a slice of bread will destroy pathogenic germs on or in that bread, and thus purify it? We think not. Which disposes of that alleged fact.

Perhaps germs were not meant; we admit they were not mentioned, but we are unable to think of any other form of purification that could have been alluded to in that statement. The second alleged fact (or is it a deduction from the previously alleged fact) is that "*toasting* removes harmful irritants". What irritants? Bacterial, as referred to above, or chemical? If the claim refers to chemical substances, pray tell us what chemical irritant can be removed from tobacco by the simple process of "*toasting*". We have some knowledge of chemistry but need help to solve that problem.

Thirdly, it is stated that *toasting* removes "irritants that cause throat irritation and coughing". Again, may we ask what is the name



and nature of these irritants (characterization of a single one will satisfy our personal curiosity) that irritate the throat and induce coughing? If the claim can be sustained, that smoking tobacco or cigarettes of any kind produces of itself a specific irritation of the throat and a characteristic cough, there are several thousand specialists in affections of the throat who will welcome proof thereof, and who will be particularly glad to be enlightened as to the specific nature of the irritant.

But that is not all—we had almost forgotten the greatest claim of all: "Everyone knows that sunshine mellows—that's why *toasting* includes the use of the Ultra-violet Ray." Ah! What a lucky strike! Ultra-violet rays (why not vitamins)—fads of the day—must be worked in to aid the old-fashioned toasting. "Sunshine mellows"—perhaps, but who has proved that it is the ultra-violet end of the spectrum that produces the mellowing effect, on fruit for instance, and what constitutes the mellowing of tobacco? Like Hashimura Toga, "we ask to know".

What, then, does our analysis show? In plain English, it shows that the bombastic radio announcement and the printed advertisements referred to are a tissue of falsehoods strung together in such an impressive manner as to deceive the simple-minded listener and reader, and the advertiser doubtless hopes that repetition of deceptive statements will give them the effect of truthfulness. And the medical profession is made to appear as endorsing all this tommy-rot.

What can we do about it? Shall we, 100,000 or more physicians, supinely submit to these nightly radio and daily newspaper insults of the Lucky Strike manufacturers, or shall we make some effort to suppress such advertising and to protect the public and ourselves against misleading, deceptive and slanderous broadcasting, whether by radio or printing?

You may recall that the old slogan of this same Company—Reach for a Lucky Instead of a Sweet—was quickly withdrawn when the sugar trust aided the candy-makers in a demand for suppression.

## Special Article

### MEDICAL TRAVEL TALK

#### A Physician's Vacation in Ireland, England and France

Henry O. Reik, M.D.

(Continued from January Journal)

Leaving Ireland by the route from Kingstown to Holyhead, we spent a week touring in Wales, en route to England; passing from the Castles of the Donohoes and the Mahoneys to the Castles of the Conways (somewhere along the line an extra letter "a" seems to have been inserted by the American branch of the last mentioned family). Rain pursued our footsteps but whereas it had been *mist* in Ireland it became a soaking and a *cold rain* in Wales. The country, too, changed from rolling hills and valleys covered with lush verdure, to barren, rocky, wild scenery with rushing streams and waterfalls, and even in August it was necessary to have a fire in our room after dinner or go to bed to keep warm. Wales does have the advantage of being a compact little country with much of natural beauty to interest the tourist and its most charming places made easily accessible. Travel by automobile buses has "caught hold" in Great Britain, and one can travel readily and cheaply from point to point by that means of locomotion. So, with Conway as headquarters, we made day trips to Llandudno, Colwyn Bay, Bettws-y-Coed, and other prominent resorts.

It was amusing to compare the famed Welsh seaside resorts with those of our country—particularly because the most famous, Llandudno, is advertised as the "Atlantic City of Wales". How the comparison first arose is incomprehensible, for there isn't the slightest resemblance of one to the other. It was pitiful to see the children hunting for a patch of sand in which to dig, when the tide was out (the beach being covered with rocks and pebbles) and to watch those courageous enough to take a bath running into the water for a momentary dip and coming out shivering, to snatch robes and run to the bath house. These resorts are famous only because they are all the country has to offer its people, and it is easy to understand that the inland city dweller and the invalids are glad to visit the coast occasionally to breathe a cleaner and more soothing air even though sea bathing facilities and comforts are not to be had.

Even the casual tourist cannot help feeling *puritanism* in the Welsh atmosphere, especially if he is familiar with the general European

conditions; a puritanical frame of mind that extends even to the naming of places and things. An amusing example was observed in certain retreats which were labeled "Public Conveniences", and the 2 sections were marked *lavatories* for men and *cloak rooms* for ladies; which we admit is a bit more esthetic than the customary signs elsewhere.

To us Wales was essentially a country of castles and feudal estates. We were impressed by those impregnable, medieval fortresses, high, crenelated towers with slits like sword gashes in their sides, and with stone walls and strong iron gates that looked down as if dazed by the modern automobile buses scurrying along the highway. The castles seemed to play hide and seek with passers-by as glimpsed over the wall and through the surrounding

charming remnant of medieval history. Let no one visiting England overlook Chester, for it is a very delightful place in itself and it is an excellent center from which to visit other noteworthy Welsh and English historic spots. For instance, it was from Chester that we embarked on a tour of the English Lake Region, going by train to Windermere and thence by automobile in a circular trip about the lakes, with stoppings at various sites to pay our respects to Wordsworth, Scutney and Coleridge—for, as Moore sang of Killarney, and Burns and Scott of the banks and braes of Bonnie Scotland, these English poets found their happiness and inspiration on the lovely shores of Windermere, Rydal and Thirlmere. Liking one place better than another is purely a matter of personal taste, or of some fortunate ad-



Fig. 1. Carnarvon Castle. Heraldic Home of the Prince of Wales

forests; ivy-covered walls and marvelous old trees that have withstood the storms of innumerable years, and a profusion of brilliantly colored flowers, especially rambler roses, against the slate gray houses. What a sense of security the barons must have had behind those walls, when the gates were closed and the drawbridge suspended in the air.

Conway Castle at the head of Conway Bay, in a town that is further protected by a harp-shaped wall, is one of the best preserved in Wales; sharing that distinction with Carnarvon, birthplace of the first Prince of Wales, later King Edward the First, and scene of investiture of the present Prince Edward, heir to the throne, who is so deservedly popular.

Entering England by the gateway of Chester, we were immediately fascinated by that

venture, and it is rarely safe to recommend a given place by using the most superlative adjectives in comparing it with others; for us, the Irish, English and Scotch lakes each has its special charms and any of them would be satisfying as our "little bit of heaven" in which to spend the remaining years of life.

Wordsworth's Seat, a massive rock situated in a grove of evergreens overlooking beautiful Rydal Water, gave us an hour's delightful repose amidst scenery that might well inspire anyone to poetic discourse on the loveliness of nature. Dove Cottage, at Grasmere, his home from 1799 to 1808, was less inspiring but afforded some thrills from intimacy with his earthly possessions, at the same time that the visit aroused pity that so noble a man, such



a benefactor to mankind, had been compelled to live in such evident poverty and discomfort.

Visiting the old church, St. Mary's, at Rydal—an accidental visit occasioned by our seeking refuge from a shower of rain—we discovered a gloriously colored, stained glass window (St. Luke and St. John) in memory of Wilson Fox, M.D., Physician-in-Ordinary to Queen Victoria, and who died in 1887; and, a bronze tablet to the youngest daughter of Dr. Matthew Arnold of Rugby, who had "served her community faithfully and well for 75 years".

Returning to Chester, and its own particular charms, let us recall that it is one of the very few cities that can today boast of an entirely surrounding old Roman wall (almost perfectly preserved by some bits of restoration), upon

handsomest and best preserved bearing the date 1503) are quite remarkable, the style of architecture being peculiar to the place, and the carving upon posts and lintels, and the mural decorations, being entertaining and instructive. Thus, Bishop Lloyd's house presents some rare wood carving illustrative of religious history, and God's Providence House a dedication which proves the original owner to have been an egotist of supreme degree. According to popular belief, the inscription—"God's Providence is mine inheritance"—was added after the plague which ravaged the city during the seventeenth century; this was the only dwelling in Watergate Street which the plague passed over; and in gratitude for that remarkable deliverance, the owner had the inscription carved on the main beam.



Fig. 2. Rydal Water. View from Wordsworth's Seat.

the top of which one can promenade entirely around the city, a distance of about 2 miles. Then, in the very heart of the city, and more curious even than the wall, are the old "rows"—a double-deck sidewalk that affords passage for pedestrians in front of shops occupying both the first and second stories of the buildings. It is worth noting that this plan of building (probably of Roman origin) was established in Chester something like 400 years ago, and that only recently our exceptionally modern city of New York has been considering the advisability of construction upon such a plan to relieve sidewalk traffic congestion; an excellent example of the manner in which civilization, so-called, progresses in circles. Some of the older buildings in Chester (one of the

Blossom's Hotel, on Foregate Street close to the main gateway through the wall, is centrally located and furnished the most comfortable and satisfactory accommodations we had thus far encountered on the trip. All points of interest were close at hand, and Chester Cathedral, particularly, proved worthy of several visitations. It is one of the few cathedrals which, at least so far as we are aware, seems not to have been awarded its due meed of advertising. Its friendly atmosphere—signs everywhere bidding you to enjoy this or that special feature—as well as the old Norman architecture produced a pleasing effect; and the cloisters of the old Abbey were among the finest we have ever seen. There, too, we stumbled upon a tomb inscribed: "William

Makepeace Thackery, M.D., Educated at Trinity College, Cambridge."

We chanced to be in Chester on August 21, when the Duchess of York gave birth to a daughter—"the first Scotch Princess for 300 years". At breakfast in the hotel next morning we found all the British guests devouring the newspapers and excitedly discussing the great event. Our waitress was as happy as if she, herself, had contributed this gift to the Empire, and was delighted by our willingness to listen and our expressed participation in the joy of herself and her nation. With the best of good will toward the Duke and Duchess, and appreciation of English feelings and customs, we could not, however, help but enjoy the following sentences from the morning paper (Daily Herald, London, Aug. 22, 1930),

We abandoned Chester with considerable regret and proceeded to London. Of that great city we shall have nothing to say here except regarding the practice of medicine. Our interest this time was principally to learn something about the working of the National Health Insurance Act, for we happened to have been in England when that law was enacted in 1911, and to have been confused ever since by the conflicting reports of its success or failure. Before taking up that matter, however, and comparing the progress of medical socialism in England and France, permit us to say a few words about medical study abroad.

It has always been surprising to us that so few American medical students take advantage of the opportunities for post-graduate study in England, where knowledge of the



Fig. 3. The "rows" on Chester's main street.

descriptive of the royal happenings at Glamis, Scotland:

"The reception of the baby Princess into this world was Wagnerian in its tumult.

Thunder pealed, lightning flashed around the castle, and the wind whistled through the trees.

The anxious crowd of motorists waiting in the driving rain and pitch darkness outside the walls of the castle, watching the lighted window of the room on the second floor of the castle where the baby was born, saw the towers and pinnacles of the castle silhouetted vividly in the lightning flashes, and at the moment when the baby was born there was a terrible peal of thunder." (Italics ours.)

In such manner does nature aid obstetrics in the advent of a royal daughter; we are staggered by contemplation of what cataclysm might have attended upon the advent of a son.

language enables them to understand what they see and hear; and that so many proceed instead to lectures and clinics in other countries, of whose language they have little knowledge, and where it is only with the greatest difficulty that they can understand fragments of lectures and not infrequently make an incorrect translation of those portions. The abundance of clinical material, in general medicine and each of the specialties, in London, Liverpool, Glasgow and Edinburgh, is evident, and in most of the specialties teachers of the highest standing are available. It is true that clinical material is not as well organized for teaching purposes in those cities as one finds it in Germany but, on the other hand, the teaching seems to us better. It depends, of course, to a large ex-



tent, upon what one desires. If one wishes to gulp his medicine in concentrated form, packed in a capsule and administered in specific doses, then Berlin and Vienna are the places for study. By way of comparison we think of the teaching in German institutions as something akin to the American business idea of efficiency and standardization, with lectures given in the most dogmatic manner, with little or no opportunity to consider other opinions, and the end-product to be a machine-made doctor housing a number of fixed beliefs; while the English teaching, by contrast, is more comprehensive, considers all aspects of a problem, and is designed to turn out a doctor capable of thinking for himself. To our own way of thinking, the English system is

during the summer months, these famous universities are happy hunting grounds for the scholastic. To prowls at will among those charming old buildings, to feast one's eyes upon their artistic construction, to muse upon the hundreds of great men who have through the ages studied and taught science within those sacred precincts, to walk with their ghosts from gateways to chapels, should fill even a simple-minded medical tourist with respect for knowledge and enjoyment of the happy brotherhood of students. Temptation is strong to write now of the 20 or more colleges that make up each of these great universities but we shall confine our references to a few that most impressed us. At Cambridge, for instance, we felt a peculiar attachment to



Fig. 4. British Medical Association Building, Tavistock Square, London.

preferable. As regards other countries, France and Italy, particularly, we may say that abundant material exists for study, and in some cities—Paris, Bordeaux, Marseilles, Rome, Florence and Naples—there are exceptional facilities for investigation provided one understands the language and is sufficiently interested to explore upon his own account. In Paris and Bordeaux a few special courses are well organized; in the Italian cities there is a wealth of clinical material in general medicine but there is little organized teaching.

From London we made 2 pilgrimages of interest; one constituting our third visit to Oxford, and the other providing our first view of Cambridge University. Fairly deserted

Caius College, the main entrance to which is called the Gate of Humility. "Through this portal arrived the eager schoolboy and he walked along a shaded path till he reached a second, and more resplendent archway—the Gate of Virtue. Through this inner entrance he passed to his residence chamber, and leading the virtuous life upon which he had embarked he came ultimately to pass out by the Gate of Honour to take his degree at the Senate House." Founded by a doctor, Caius College has always been a home of medical learning, and among those who once passed through the Porta Honoris, was the great William Harvey, discoverer of the blood circulation.

At Oxford, probably because we had so of-

ten heard Sir William Osler speak affectionately of them, we admired most Magdalen and Christ Colleges—in the latter, reading the name of Osler's only son inscribed upon the marble scroll of honor among those who gave their lives in the World War—and the Bodleian Library which was very close to Sir William's heart.

Now, returning to observations made during this summer's visit to London, let us say that we avoided hospitals and paid attention only to medical economics. We did take a look at the magnificent old homes of the Royal College of Physicians and the Royal College of Surgeons, and then visited the handsome new buildings of the British Medical Association on Tavistock Square.

At B. M. A. Headquarters we made the acquaintance of the Deputy Medical Secretary, Dr. G. C. Anderson, in charge during the absence of Secretary Cox, who was then in Canada attending the British Medical Association Convention, and in addition to showing us through the new building Dr. Anderson was extremely kind in supplying information relating to the practice of medicine in Great Britain. From him we secured also literature bearing upon the association's work.

What we shall have to say concerning British medical affairs is the outcome of personal observation and of conversations with a number of physicians, including Drs. Russell and Hennessy, in Dublin, and Dr. Anderson, in London, but we are solely responsible for inferences and conclusions and trust our readers will not hold any of the above mentioned persons responsible for our views; such views being a composite of impressions from many sources.

Our attention was attracted first to advertisements indicating that insurance in the nature of defense and protection against malpractice suits is just as necessary in England as in the United States, but some of the published matter left us in doubt as to whether such insurance was offered by the national medical society. That was straightened out for us and we learned that there are 2 policies available to physicians and surgeons; one with the London and Counties Medical Protective Association; the other offered by the Medical Defense Union; each being essentially the regular type of insurance company. The British Medical Association has more than once considered the plan of self-insurance of its members but has so far resisted that proposition, and at present the officials look upon the Defense Union as the more satisfactory of the

2 companies named above. The initial charge is 10 shillings (\$2.50) and annual premium £1 (\$5), for which subscribing members are entitled to unlimited defense and indemnity. The plan in vogue, then, is similar to our own group insurance but seems to be less expensive.

We were most anxious to learn something positive and exact about the status of the National Health Insurance Act and its effect upon the medical profession. As stated before, we happened to be in England when the law was enacted, in 1911, and again in 1912 and 1913 when opposition of the organized profession was very pronounced. Even in later years some British medical journals, and letters from British correspondents published in the Journal of the American Medical Association, have continued to criticize the scheme and to point out flaws in its construction and objections to its application. We were, however, at the same time aware of the fact that many practitioners in England and Scotland looked upon it as a beneficent law; a law which, like many others, had some objectionable features, or that was susceptible to abuse, but which benefited much more than it harmed medical practitioners. Recalling some of the praise we had heard, especially from country practitioners, we have been surprised at times to read articles declaring the whole plan a failure and the very special *bête noire* of British physicians. After a time we arrived at the conclusion that objections came mainly from the highly business-successful practitioners, and that the *average family doctor* was willing to admit that he had gained, in a financial sense at least, from application of this law. Furthermore, it became evident that much of the criticism dealt with *minor defects in the law* and *major defects in human nature*, and consisted not infrequently in exaggerated statements, verging sometimes upon falsification. For instance, within the past year we have, in some of our best American journals, read denunciations of the law based largely upon the allegation that "the patient is deprived of his right to choose his own physician"; a mis-statement of conditions that has been repeated hundreds of times and which could readily have been avoided by looking at the written law. For these reasons we wanted to get at the facts and, consequently sought interviews, asked questions and secured copies of authoritative documents. So, next month we shall present comments upon the existing law and upon the recently proposed extension Act.

(To be continued.)



## Esthetics

### RECOGNITION OF HOME TALENT

It has been our custom to employ bits of poetry now and then to fill an unexpected space in the Journal, to enrich a tribute to some departed brother, or to enliven and entertain our readers. On several occasions we have enjoyed the privilege of presenting original poems contributed by members of our own state society. Never before have we devoted all of this departmental space to poetry but as we have at hand some material that has already awaited publication far too long a time because we could not find an appropriate Journal opening, we have concluded to offer you in this issue 2 contributions from the pen of Dr. Cone, and 1 from Dr. Corson—both of whom, as you well know, are prone to give vent to their feelings in rhythmic verse.

### THE WAR NURSE'S STORY

Ralph S. Cone, M.D.,

Westwood, N. J.

(Written January 1918.)

Some folks think we nurses are heartless,  
How little they know, to be sure,  
When they say that our hearts become hardened  
Because of the sights we endure.  
Though we can't let our feelings be master  
And must have control of our heads,  
Please don't believe we are all alabaster,  
With hearts like our hospital beds.

I could tell you, sir, many a story,  
Nightmares from the lines of the French;  
We have cases I hardly dare think of  
Brought in from the field and the trench.  
I've nursed all sorts and conditions,  
The coward as well as the brave,  
The good and the bad, the indifferent,  
And know how each can behave.  
I have loved and been loved by the grateful,  
Been insulted and cursed by the bad  
All kinds are brought in to us here, sir,  
And some cases are terribly sad.

There was one, not so long ago, either,  
Of a poor little bairn we had here,  
I say bairn, but he was a soldier,  
In age about twenty-one year.  
Well, he was brought in, I was saying.  
It had been a hard day and 'twas late,  
He came with a number of others  
All scorched to the color of slate.  
Just breathing they were when they reached us  
And gently we cut off their clothes,

Or what there was left of their garments,  
For not much remained but their shoes.  
Their heads were as bare as their faces,  
There escaped not a vestige of hair,  
Their features were like nothing human  
And their eyes had a horrified stare.  
There were ashes and dirt clinging to them  
And the smell made me dizzy and queer,  
Though the doctors said they didn't suffer  
And they'd all quickly die, it was clear.

Well, it fell to my lot to nurse this one,  
I whispered a prayer and began  
To take charge of my terrible bundle  
That bore the rough shape of a man.  
Ah, we do grow fond of our patients,  
What injustice to say 'tis not so!  
I think, sir, that those who say such things  
Have never been where they could know.  
How can a nurse fathom the feeling  
She has for the helpless and ill?  
As a fond mother loves most her weakest,  
She loves those who most need her skill.

Well, my boy passed this night and the next  
one,

My duty was his case alone,  
All the others *had* died except him, sir,  
And I took him all for my own.  
'Twas a labor of love as you might say.  
How I watched every breath that he drew,  
And at times he would seem to be conscious,  
But what he thought nobody knew.  
The doctors all marvelled he rallied  
And they said if his temperature rose  
'Twould mean rally from shock at the most  
sir,  
But my brave fight they feared I must lose.

I rebelled at their verdict and nursed him  
I knew that he lay at death's door,  
But I prayed to the good God to help me  
As never I'd prayed, sir, before.  
There he lay, like a ghost on his pillow,  
His face all enswathed in a mask  
His arms resting still alongside him  
No complaint and no questions to ask.

Then came what the doctors predicted,  
He rallied and I watched and prayed  
So far God had seemed to be with me  
And the cruel hand of Death to be stayed.  
My ward here was crowded with soldiers,  
Each bed held a victim of war,  
And the dull heavy booming beyond us  
Made it plain we'd soon have many more.  
Every hour they'd come in on stretchers,  
Poor bodies all shattered and torn,  
While our doctors worked on like grim de-  
mons;  
Brave Heroes! Thank God such are born!

My helpers at this time were many,  
Extra nurses to us had been sent,  
That's how I was spared to my soldier,  
My own now by common consent.

In the ward we've a box of tin soldiers  
The recovering men use as toys,  
They amuse themselves, sir, by the hour  
Just like great big over-grown boys.  
I think there's some fifty or sixty  
All painted in dirt colored hues  
To represent men in the trenches,  
No scarlets nor grays, sir, nor blues.  
Our men have them labelled by nations  
And arranged in the proper array  
They form them in different positions  
And battle it over each day.

Though he seemed to grow weaker and thinner  
And his poor senses going a bit,  
My bairn followed the games of the soldiers,  
I could see by his eyes through the slit.

Well, he lay in this state a whole fortnight,  
Being fed through a tube in his nose,  
For he'd breathed in the flames and to swallow  
Brought on the most terrible throes.

One night between midnight and morning  
I thought that I noticed a change,  
'Twas like a mysterious warning,  
An uncanny thing, and so strange;  
The ward light had sunk in its holder  
So low it had almost gone out,  
When I looked at my boy on his pillows  
And saw his hands groping about.

Quick I made a new light and came to him,  
Took his pale, waxy fingers in mine  
And said "Laddie", but he was past knowing  
And I felt there the Presence Divine.  
I watched him perhaps half an hour,  
Lying there like a fluttering bird,  
When all at once up from that bed, sir,  
Came the sweetest voice ever I'd heard:  
"Dear Nurse, won't you bring out the soldiers  
And set them up where I can see.  
It's dark, but I know you can find them  
You'll put them up, won't you, for *me*?"  
Sir, these were the first words he'd spoken  
And they came from the pillows so clear;  
But I knew that they couldn't be natural  
With Death's Angel waiting so near.

When I'd set up the soldiers I watched him,  
He just seemed to rise in his bed  
And reach his arms out toward the candle  
And that's all I know—he was dead.

The nurse bowed her head on the table,  
No more could the good woman say,  
There I left her alone with her reveries  
And, silently passed on my way.

## REQUIEM TO THE UNKNOWN SOLDIER

Ralph S. Cone, M.D.,  
Westwood, N. J.

(Written December 10, 1929.)

A silent mass before this brass,  
Stranger, it is his due!  
For o'er this grass ye shall not pass,  
But pause this shaft to view.

Perchance ye came to read some name  
Emblazoned bright as day;  
Not to his shame, unknown to fame  
His name rests with his clay.

Or, knowing all, ye felt the call  
To mourn the Unknown Dead,  
To here let fall in Memory's hall  
A tear above his head.

The foe to block and kings unfrock,  
With steady eye and hand  
While earth did rock he braved the shock  
And shell of No Man's Land.

These wind-swept mounds are hallowed  
grounds,  
This shaft his resting gun,  
And peace surrounds, no more the sounds  
Of war his senses stun.

Ye placed this stone o'er the Unknown,  
It giveth him no pain,  
But hark his moan, "Lest ye atone  
Our sacrifice is vain".

No cenotaph nor epitaph  
Can make him live again  
Till holier deeds than his must needs  
Arouse the awe of men.

No mortal praise his form can raise  
Nor should ye cry, "come forth"  
But meet his gaze through battle's haze  
And show ye know his worth.

Why weep ye so as on ye go  
With many a pensive sigh!  
I tell ye though ye laid him low  
His God hath raised him high.

## PHLEBITIS

E. S. Corson, M.D.,  
Bridgeton, N. J.

A gray little nerve cried an alarm  
For a little blue vein suffering harm.  
"Its walls are swollen turgid and thick,  
I am sure its owner must feel very sick",  
And its owner feeling something awry,



For pain and anguish raised up a cry  
The doctor came in with a wise look and said:  
"I advise this patient at once put to bed,  
Keep two little bulbs steady and bright  
Burning away, all out of sight;  
Doing their duty in regular form,  
Under the covers cosy and warm.  
Patience, pluck, perseverance and prayer,  
Are needed indeed to make a repair,  
With pillows and crib and leg elevated  
Four weeks in bed surely you're slated,"  
The little corpuscles got in their work,  
Nor did the blood plasma any bit shirk.  
They hurried by night as well as by day,  
For the two little bulbs lighted their way.  
Nor once did the cold their mission delay,  
The heat made their vigor more strongly display,  
With petting, nursing, flowers and fussing,  
Time went apace and pain went a buzzing.

## Medical Ethics

### MORE HEALTH ETHICS

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, N. J.

When Walter Camp published on August 5, 1920, in Collier's Weekly, his article on "The Daily Dozen", he really started something. Born in 1859, Camp was then just 61 years of age, and like the beer that (once) made Milwaukee famous, it was Walter Camp that made Yale College famous as a center for all the best there is in college athletics and football activities. And now, his "dozen" has made Walter famous.

Before this, notwithstanding the fact that the country was full of "deflated men and inflated women", calisthenics *per se* had never been popular. A well-advertised magazine on Physical Culture had long told us that exercise was the only straight and beautiful road to health. But, sad to relate, if one accepted the statements in this gem of literature, doctors were themselves the chief obstructionists to attainment of this blessing. The "big idea" seen in the pages of that magazine was that it was idle to throw down a medical pill when you could obtain your objective in throwing up a medicine ball! To make calisthenics popular, beautiful girls, with all their curves, gave each page a pictured charm. Male ditto almost made one think that by following suit he, too, could make his life sublime; and if he had any doubt of this it was only necessary to read the any pages of advertisements.

It seems a pity that this magazine still takes

delight in knocking the doctors, for they might easily be won over to the cause. Doctors are just as much interested in health as they are in sickness! They also cultivate their own muscles—*vide* any afternoon on any golf course.

We live now in a standardized world. I doubt if Walter Camp, away back in 1920, when he advocated his daily dozen under the classified titles of

- (1) heads
- (2) hands
- (3) hips

- (4) grind
- (5) grate
- (6) grasp

The Daily Dozen

- (7) crawl
- (8) curl
- (9) crouch

- (10) wave
- (11) weave
- (12) wing

ever intended them to be strictly standardized for the whole family from the baby to grandma.

Nowadays, we eat to the accompaniment of jazz and naturally it follows that our morning set-up should have the same incentive. It is debatable whether this very much aids our digestion; but possibly the timing and rhythm keep us bravely on our morning chore. It does appeal to the youngsters, I admit. Some say a few properly selected personal exercises would be better adapted in isolated cases.

The human race (not using the word in the sense of speed) is peculiar. We really do hurry from one thing to another and often discard the good for something that is new.

We are informed that Chauncey Depew lived into his 94th year and never walked a block (if he could help it). Our own Thomas A. Edison is going strong at 83, yet I have my doubts (being his personal physician) if he ever wants to exercise any part of his anatomy except those parts above his collar. Here by contrast, you have Walter Camp dying of heart disease in his bed at night in his 66th year.

Exercise is, however a good thing for the physical well-being of any animal, human or otherwise. There is no doubt that most muscles crave work. Did you ever see a team of huskies at their job? How do you explain the joy in mountain climbing which often disregards all danger? Watch sports on track and field.

Any exercise can be taken in the wrong way, with resulting harm and resulting damage. It

has often been remarked that all this can be avoided. Doubtless there are many who should not even attempt the morning set-up. Now, this is important—"the real value of setting up exercises comes through the circulatory system, the breathing and the general carriage", and all this can be effected in a short space of time with little effort, but the effort must be daily—it must be routine. Remember if you are set down instead of set-up, you must leave it alone.

Did you ever regard your *side* view in a long mirror with all your clothing removed? You will probably receive a shock! What displeases you can be corrected by suitable setting-up exercises. If you are a business man, it is foolish, intending to catch the 7.57 a. m. train to arise at 7.23, rush through your daily dozen, wash, shave, stop at the closet, eat your breakfast, kiss your wife and your five children, catch your train on a rush, and expect to be much benefited by these maneuvers. You must be willing to sacrifice a little of your sleep. The funeral is always your own.

As one goes along in life, and gets older, one should be more and more careful about the proper exercise to be taken. To a certain lesser extent this is true even in youth. Do we as doctors not believe that *competitive* athletics have their danger? Can we believe that the violent exertion of winning a crew race is of very much benefit to the health? It is not so very unusual to see some members of a competing crew, at the finish, fall back in their boats insensible, and sometimes even spit blood! Did you ever watch the facial expression of the flat or hurdle racer as he nears the tape? "One must put in it all that one has got *and then some*" to win the prize. And what prizes do they often win in later life? Possibly a dilated heart that certainly cripples their declining years. Do you think that Walter Camp's death from heart disease was influenced by the intense football activity of his youth?

Go with me into the locker-room of any golf club and see the old men come in after their day's sport. Some are hollow-eyed and show absolute fatigue; some show cold hands and a leaking skin. How many of them will you find who at once call for a high-ball or a cocktail? This is not a diatribe against golf, to which the writer is absolutely sold. It only shows that when one engages in athletic activity after a certain (uncertain) age, one should have expert advice. With our excellent cardiac specialists easily on call, one should not neglect periodically to have an electrocardiogram taken; blood-pressure is not enough. We must remember that this is an

age when deaths from heart disease have outstripped deaths from tuberculosis. There must be some reason for this. Why not find out what that reason is?

But this paper remains what it at first intended to be—a *plea for exercise*. The therapeutics of exercise have been told us so wonderfully by Goldthwait, Camp, Garthwaite, and many others. We do not need to answer the advertisements of what Fishbein humorously calls (yes, I said *humorously!*) "the big muscle boys". Their appeal is more for money than health, just as so many Physical Culture magazines are money getters chiefly through their sex appeal lure.

Walter Camp's daily dozen have been so much disguised and distorted that not one in a hundred readers can off-hand give them their original names. Camp, however, did a great work. It will live! He stressed the avoidance of strain, over-exertion, exhaustion. He proclaimed a system that could be adapted to the need and use of every one: little Willie and Dad, young and old, even the sick or the well. He *also* stressed the great benefit of the "rub down". He, time and again, stressed the valuable exhortation that it was not the spasmodic use of his system, but its daily, long-continued practice, *a routine*,—and that this only would surely afford the promised good.

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## Collateral Reading

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### SANTA CLAUS AND NEW BOOKS

It has been our custom for some years past to scan the book publishers' lists in the late autumn, to select those which seemed most promising in the way of affording knowledge and entertainment, and then to purchase such as we most desired for personal reading and for passing along in December as Christmas gifts to friends. By that process we gained a double joy from some books—the joy of reading and the joy of giving—and made sure of having some Christmas gifts, as it were, through retention of such of the books as we were too selfish to relinquish. Furthermore, kind friends, knowing our weakness—we might say double weakness, since our craving for books is probably quite as much due to a demand created by mental deficiency as it is to love of reading and possession of books—have usually on festive occasions presented us with books.

The reading matter left here by Santa Claus on his most recent visit is so varied in char-



acter and the books so numerous that we are tempted to tell you just what is stacked upon the table awaiting a chance to regale and instruct us during these long winter evenings.

The list of titles and authors includes:

Humanism as a Way of Life (J. George Frederick)  
 Individualism, Old and New (John Dewey)  
 Pre-War America (Mark Sullivan)  
 Conquest of Happiness (Bertrand Russell)  
 The Lives of a Bengal Lancer (F. Yeats Brown)  
 The American Leviathan (Beard and Beard)  
 Mrs. Grundy (Leo Markun)  
 Pauline; Favorite Sister of Napoleon (W. N. C. Carlton)  
 Cakes and Ale (Somerset Maugham)  
 The Human Mind (Karl Meninger)  
 Fads, Frauds and Physicians (T. S. Harding)  
 Women and Monks (Kallinikov)  
 Soviet Russia (W. H. Chamberlin)  
 Enchanted Brittany (Amy Oakley)  
 Between River and Hills (Sisley Huddleston)  
 Roads to Roam (Hoffman Birney)  
 Our New Progress (James Bayard Clark)  
 Doctor and Patient (Francis W. Peabody)

What a feast in prospect! Philosophy, history, ethics, morals, romance, science, an attack upon science, love and war, bolshevism, American prosperity (?), travel, and the poetry of a physician's life. What more could one ask? Where shall we begin with our reading?

In all probability we will express to you our opinions concerning some of these books but it is a duty first to dispose of one that has been on our desk for some months, and we therefore offer the following review.

#### THE BIOLOGIC BASIS OF HUMAN NATURE

H. S. Jennings

Professor of Zoölogy in the Johns Hopkins University

(Reviewed by the Editor)

In his introduction to this book, Prof. Jennings says: "Human individuals are diverse—in their appearance, and in their behavior, and each has a separate consciousness, a separate identity; so that the inward experience of any one of them is a distinct thing from that of all others. In some or all of these respects they are typical of the material of biology.

How does it happen that individuals are thus diverse, both outwardly and inwardly? Why has my neighbor tastes and opinions so different from my own? Why does he conduct himself in a manner that may seem to me undesirable; a manner so diverse from that which I would practice under the same conditions?

Why is one man fitted for one sort of work, another for another sort; and some for none at all? Why do precise experiments in the laboratory of psychology give with different individuals diverse and inconstant results? Why are my own children so diverse from me and from each other? What is it that makes the behavior of human beings so incalculable, inconsistent, astonishing? These are the most practical questions of life; and the most interesting in theory."

Beginning with a detailed explanation, in simple, easily understood language, of the fundamental factors in the genesis of animal life, he carries us through the biologic growth of man, and discusses the effect and the limitations of genetics practiced scientifically. To indicate Dr. Jennings' literary style and to give you an indication of his method of dealing with these important questions, we can do no better than quote several pertinent paragraphs; at the same time advising you to read the entire book.

"Characteristics do not fall into 2 mutually exclusive classes, one hereditary, the other environmental. A given characteristic may be altered by changing the genes; and this is the ground on which it is called hereditary. But the same characteristic may be altered by changing the environment; and this is the ground on which it is called environmental. The genes supply one set of conditions for development, the environment another set, and there is no necessary difference in kind between them. The characteristic produced may be changed by adequate alteration of either set. From the nature of a distinctive characteristic, it is not possible to decide whether it is due to diversity of genes or to diversity of environment, since the same peculiarity may be due in different cases to either set of causes.

Which is more important for the characteristics of organisms, heredity or environment? What is more important for the characteristics of man? Which is more important for the manufacture of automobiles, the materials of which they are made or the method of manufacture? This question is like the other. No single general answer can be given to either. For good results, both fit materials and appropriate treatment of these materials are required; good genes and fit conditions for their development. From materials of a particular sort, a good machine of one kind can be made, not of another kind. A method of manufacture that will fit one type of material fails with another. Materials that are excellent for one sort of machine are poor for another; and the fittest of materials require proper handling if their possibilities are to be realized. Either poor materials or poor hand-

ling can ruin a machine or an organism. If the materials are worthless, if the individual starts with thoroughly poor genes, the method of treatment, the environment, can do little. And if the material is spoiled in the process of development, it makes little difference what it was at the beginning.

Most diseases are greatly influenced by the conditions of life; yet most or all of them are likewise influenced by the nature of the individual's genetic constitution. For the occurrence of tuberculosis, infection with the tubercle bacillus is required; and this is not a matter of genes, of heredity. But some combinations of genes yield a much better culture medium for the tubercle bacillus than do others. A person that has such a gene combination is much more likely to develop tuberculosis than another whose genes do not yield a good culture medium for the bacillus. An "hereditary" element is therefore involved. Yet the individual whose genes produce a body that is prone to tuberculosis need not develop the disease if he takes measures to prevent the bacillus from getting a foothold in his body. Doubtless there are many different types and grades of individuals with respect to this matter. Some offer a particularly favorable ground for the growth of the tubercle bacillus; others a less favorable ground, and so on through a series of grades, till we reach individuals who are almost or quite immune to attacks of the disease. The genetic constitution is therefore of much importance in connection with tuberculosis. Yet the environment is probably even more important. It is entirely conceivable that by the discovery of measures effective in preventing the transmission and development of the bacillus, tuberculosis could be brought to disappear; so that genetic differences in susceptibility to it would be of no further consequence.

. Similarly some combinations of genes yield bodies that are much more prone than others to break out into that unregulated growth that is called cancer. In rats and mice, under the usual conditions of existence, individuals having certain sets of genes almost invariably develop cancer, while those with other genes do not. In other strains, with another set of genes, about half the individuals develop cancer; in still other strains, none. These differences are inherited in Mendelian fashion, showing that they are due to differences in 1 or 2 genes.

There are in these animals strains in which

a bit of grafted cancer tissue regularly develops into a cancer; others in which this almost never occurs. There are strains that are particularly susceptible to one kind of cancer, not to another. Many grades and qualities of susceptibility exist, up to that of individuals derived from such combinations of genes that they almost never develop cancer.

It is probable that in man there are similar diversities in susceptibility to cancer, resulting from the different genes of different individuals. There is, however, no indication that there exists in man strains having the extreme susceptibility to cancer shown by certain races of mice. These extremely susceptible races of mice are isolated and multiplied by careful selection and by breeding in such a way as to bring together and preserve the gene combinations that are most susceptible to cancer. This does not occur in man, so that there is no reason to suppose that there are any human beings who are predestined to develop cancer, whatever the conditions. The environmental conditions that play a part in cancer are little known; though it is known for rats and mice that under certain conditions cancer is produced in individuals that under other conditions would not suffer from it. It is conceivable that knowledge and control of the environmental factors for cancer (as for tuberculosis) should progress to such an extent that the genetic factors would, in the case of man, become of little importance.

A situation that is similar in principle to that sketched for tuberculosis and cancer exists for most, if not all, diseases, infectious or otherwise. Certain environmental conditions are required for the occurrence of the disease; or at least greatly influence it. But under conditions favoring the disease, some combinations of genes yield to it, others do not. It is probable that there is no disease whatever, acute or chronic, infectious or non-infectious, whose occurrence is not influenced by the nature of the individual's genetic constitution. There can be little doubt that, other things being equal, some genetic constitutions are more readily attacked by plague, by small-pox, by typhoid, by pneumonia, than others; just as some combinations of genes yield more readily to extremes of temperature, to exposure to the elements or to unfit food; just as some gene combinations are more likely than others to come off victorious in a struggle with a wildcat, or to survive a bite from a rattlesnake."



# Lighthouse Observations

## REHABILITATION OF THE DISABLED

Several original articles and discussion there-of published in the December and January Journals, concerning industrial surgery and its relation to the Workmen's Compensation Act, reminded us of the recent work of the American Medical Association's Council on Physical Therapy and the published recommendations bearing upon physical therapy in the handling of injured persons. Dr. Harry E. Mock, in a paper bearing the above title—*Rehabilitation of the Disabled* (Jour. A. M. A., 95: 31, July 5, 1930)—said:

During the last 2 or 3 decades a new era in the practice of medicine has gradually developed. Healing the burns and then leaving the patient to his own devices to overcome scar contractions is not adequate treatment. The best possible reduction of a fractured leg and treatment until solid union has occurred is poor surgery if meanwhile the surgeon has paid no attention to the protection of adjacent joints, has given no consideration to maintaining muscle tone, and fails to utilize those adjuncts of treatment which will assure a rapid return to normal function of the injured leg. Only by continued interest of the physician in his patient during the long period of chronicity of the disease or injury, during the long days of convalescence, even following the patient back on the job to ascertain that proper work is secured and making sure that both his mental and physical restoration is assured, can the ideals of physiologic medicine be achieved.

The field and scope of rehabilitation of the disabled lead the physician to consider many lay adjuncts that heretofore have never been considered a part of medicine. To accomplish successfully the rehabilitation of patients the profession must make contacts with these lay agencies. Rehabilitation includes:

*Prevention.* (1) By analytic study of the disease or accident to prevent a similar occurrence to other individuals. (2) By treating the case in such a manner that function will be preserved in adjacent parts; that traumatic neuroses will be combated from the start; that habits of idleness and loafing will be prevented.

Every physician or surgeon engaged in private or hospital practice secures information from certain patients that shows a work hazard as responsible for a given condition. A short letter stating the facts to the responsible industry will in most instances result in a correction of the condition and therefore prevention of a similar disease or accident. This type of preventive work is just as essential as the reporting of contagious diseases or of lead poisoning, yet how few physicians think of this as a duty.

*Treatment.* (1) The best possible treatment directed toward the earliest possible recovery with the greatest possible functional restoration. (2) Use of physical therapy as an aid in functional preservation and restoration. (3) Use of occupational therapy to combat habits of idleness and often for the purpose of training for new work.

To the surgeon interested in rehabilitation will be referred many patients in dire need of reconstructive surgery. Deformities and handicaps must be corrected and function restored so far as is humanly possible before the subsequent steps of rehabilitation can be completed. This is becoming so well recognized that state depart-

ments of vocational, reëducation for the disabled, state compensation boards, schools interested in the training and education of crippled children, industries, and railroads and even private organizations interested in the disabled are frequently sending patients to such surgeons to ascertain whether anything can be done to improve their physical handicaps. Too often it is apparent that if proper measures had been instituted during the initial treatment this subsequent physical rehabilitation would not have been necessary. Deformities of the hands following tendon and nerve injuries contribute largely to reconstructive surgery. In many of these cases the original operations by the surgeon treating the initial injury would have been successful if that surgeon had been familiar with and had possessed the facilities for administering proper physiotherapy. Breaking up stiff joints by manipulation under anesthesia results in many permanent, bony ankyloses. The slower methods of physiotherapy are far better. In a certain number of skull fractures, the syndrome of persistent cerebral contusion develops. Too often these sufferers from indefinite symptoms are called malingerers and are mishandled for months or even years; making up a pitiful class of the handicapped for whom rehabilitation is very difficult.

No surgeon today is adequately equipped to treat trauma cases who is not familiar with those physiotherapy measures which will assist in the restoration of function. It is not necessary for him actually to administer the physical therapy but he must know when massage and active exercise should start in every type of fracture; when heat, massage and muscle training exercises are indicated in nerve and tendon injuries; when heat in the nature of diathermy is indicated. Manufacturers of certain forms of machine therapy, for example, lights and electric apparatus, have been active in advertising and selling these agents to the profession until many surgeons think that physiotherapy refers only to such modalities. They have their uses in the hands of physiotherapy specialists but are not necessary for the simple physiotherapy procedures that are required in 95% of trauma cases.

*Convalescent care.* (1) Early removal of the patient from hospitalizing influences. (2) Seeking convalescent provisions for those whose home conditions furnish unsuitable environment.

Provision for proper convalescence is the missing link in the chain for treating disabilities and injuries. Think of the saving to industry and to the hospitals if 25% of ward patients, after a month or 6 weeks' treatment, could be transferred to a convalescent center where occupational therapy, physical therapy, outdoor exercise and even vocational training could replace the idleness, the reading of cheap novels, the card games and the complaining about food and nurses which make up the life of the average ward patient in the average hospital.

*Placement at suitable employment.* (1) Light occupations in the industry until such time as the patient can return to his regular position. (2) Choosing a suitable job when disability prevents return to his old position. (3) Development of placement bureaus for the handicapped.

There are thousands of handicapped individuals for whom employment is one of the gravest problems of our times. This is not medical work, yet if, as surgeons, we are aiming for an economic end-result for our patients, it is one of the most important steps in the rehabilitation pro-

gram and it is a movement which every medical man should abet in every possible way.

**Medical follow-up.** We must develop our follow-up clinics or office hours devoted to seeing patients with permanent disability periodically until assured that full functional restoration, so far as is humanly possible, has been secured; that the work they are doing is compatible with their handicaps, and above all that the microbe of dependence has not entered and undone all our efforts to rehabilitate.

### Message in Rehabilitation Work

In connection with the article above abstracted, we would like to mention a special article by Drs. Mock, Pemberton and Coulter (Jour. A. M. A., 94:1989, June 21, 1930) covering in a detailed and very thorough manner the use of massage and exercise in the treatment of injuries of all sorts and in the follow-up rehabilitation work. The article is too lengthy for satisfactory abstraction and deserves to be read in its entirety.

## Current Events

### TRISTATE MEDICAL CONFERENCE

The sixteenth session of the Tristate Medical Conference was held at the Chelsea Hotel, Atlantic City, Saturday, December 6, 1930, being called to order at 10 a. m. by Dr. George N. J. Sommer, of Trenton. Those in attendance were:

New York: Drs. William H. Ross, Brentwood, Long Island; James N. Vander Veer, Albany; and Joseph S. Lawrence, Albany.

Pennsylvania: Drs. William T. Sharpless, Westchester; Ross V. Patterson, Philadelphia; Walter F. Donaldson, Pittsburgh; Frank C. Hammond, Philadelphia; and A. C. Morgan, Philadelphia.

New Jersey: Drs. George N. J. Sommer, Trenton; and H. O. Reik, Atlantic City.

Telegrams and letters of regret were read from Drs. Sadlier, Trick, Mayer, Overton, Dougherty, Donohoe and Conway, who were unable to be present.

*Dr. Sommer:* It is needless for me to welcome you here to Atlantic City. The session will be opened by Dr. Henry O. Reik, Executive Secretary of the Medical Society of New Jersey, who will read a paper, as scheduled upon the program.

### Automobiles More Deadly Than War Can We Control Their Death Rate?

HENRY O. REIK, M.D.,  
Atlantic City, N. J.

The subject which I am bringing to your attention may, I fear, have seemed to you upon receipt of the preliminary program a queer one to present for consideration by this conference. It might better have been addressed to the general public, but, if discussion of it and action upon it meet with your approval it can be carried to the public later much more forcibly. If you disapprove, and if mine be but "a voice crying in the wilderness", I shall at least have had the comfort of crying aloud and of letting the world know about my woes. In my opinion we are too calmly watching a situation that disgraces civilization, and for the past 5 years I have not only been greatly agitated over existing conditions, but amazed that there has not been an outcry con-

cerning the calamitous destruction of life that is daily recorded.

In a country that claims to be the most enlightened and the most humane, we sacrifice human life to unrestricted pleasure on a scale that was never before known and is even now scarcely recognized by the majority of our people. And the contrast between certain rules of our conduct is almost unbelievable. We scathingly condemn bullfighting, and refuse to permit, in New Jersey at least, even an exhibition performance (which action I, of course, approve) lest 1 or 2 animals may be tortured or killed. A considerable percentage of our people, as may be witnessed in this very city today, sets up a howl of protest against the vaccination of dogs, designed to protect those animals and prevent the spread of rabies among human beings, on the score that a hypodermic injection might discommode somebody's pet poodle. And yet, almost without protest of any sort, we read daily of the slaughter of innocents on our city streets and country roads by that modern juggernaut—the automobile; an engine of destruction that is excelled only by major implements of warfare. Human life seems to have become of so little value that we can read unperturbed about murders and accidents that properly belong in the category of murder.

On April 6, 1917, the United States of America entered the World War. On November 11, 1918, the Armistice was signed. In that period of almost exactly 19 months this nation lost in action 36,931 soldiers, and the number of deaths occurring later from the effects of wounds and diseases brought our total loss up nearly to 50,000. The average number of killed in war per month was 2100; the average number per day, 70. During the year 1929, the number of deaths in the United States caused by automobiles reached the total of 31,000, as against 28,000 recorded for 1928, and the prediction on the first day of this month, December, was that the number of deaths due to automobile accidents will reach in 1930 the astounding figure of 33,250. These last figures constitute an average of 91 persons per day, as compared with 70 per day killed in war. A community having a population of 33,000 constitutes a city of the first class, according to the census classification; and we nonchalantly wipe out of existence such a city each year. Worse than that shocking realization, is the fact that an additional 1,000,000 persons are during the same year injured and more or less permanently crippled by accidents in which automobiles play the main part. Every 15 minutes throughout the day and night, 11 citizens are injured by those deadly machines. Incidentally, the property loss in damage from automobile accidents amounts to approximately \$700,000,000 annually. All of these figures have been increasing at the rate of 10% per annum since 1920, and the end is not in sight. It has been estimated that during the past 10 years more than 150,000 American citizens have been slain, and more than 5,000,000 injured by automobiles, embracing pleasure vehicles and trucks; a death toll heavier than that of the worst war in which we have ever engaged. For 10 years we have been participating in peace conferences, war prevention plans, naval reduction and disarmament meetings—national and international—but nobody pays anything more than momentary attention to the horrors of automobile killings. We erect monuments to the killed in war—though the soldier had a "fighting chance"; but where is there a monument to the automobile victims? Where is the Kellogg pact that will conserve for us 33,000



lives yearly, and the Dawes plan that will save the country \$700,000,000 automobile wreckage annually?

Studying the above figures, is it any wonder that the City Club of New York headed one of its periodic Bulletins with the statement, in heavy black type—"All Murder Records Broken; Motor Vehicles in New York Streets Make Their Heaviest Killing This Year!" It happened that the Bulletin was devoted to a plea for additional playgrounds and parks to keep children off the street, and safely out of reach of the automobile, but the automobile death toll is by no means limited to children, nor even to careless pedestrians—the so-called jay-walkers. The very article just referred to stated that the proportion of children to adults killed, out of the 950 deaths then under consideration, was 386 children and 564 adults (practically 3 children to 5 adults); which is contrary to the impression one gathers from general reading.

The only statistics I have seen, analyzing groups of persons killed, stated that 60% of automobile fatalities in the United States are caused by automobiles striking pedestrians, and only 20% are due to the collision of machines; that the auto death rate for females is only 35% of that of males; that the age period between 5 and 9 years carries the heaviest toll; and that between the ages of 4 and 65 the automobile is the most important cause of accidental death. It is, of course, always a pathetic occurrence when children are killed while engaged in some outdoor game, but it is a matter of no less importance that even a larger number of men and women are killed during the rush hours of traffic when they are returning home from their day's work; for it has been shown that the highest percentage of accidents in the city occurs between the hours of 5 and 6 p. m. As regards the exposure of children to automobile accidents, Mr. D. S. Beyer, Director of the National Safety Council, made the following statement in an article on accident prevention: "As children, we may have shuddered over the stories of persons maimed or killed by wild animals, but on looking up the comparative figures, it is rather startling to learn that while there were 2600 people killed in India in 1 year by wild animals, poisonous snakes, etc., there were over 20,000 killed in this country by automobiles alone. Apparently, it would be safer for my child to walk through the dangerous jungles of Africa or of India than to cross the street in front of her home."

When we come to consider the character and the causes of automobile accidents, we find a confused state of affairs, largely because there has been very little done in the way of thorough investigation of accidents. Very naturally, a death-dealing accident is accompanied by a condition of excitement and there is generally no one at hand competent to investigate and study conditions thoroughly and without prejudice. Attention is apt to be fixed upon ascertaining the person at fault, and but scant attention is given then or later to consideration of *how* and *why* the guilty party acted as he did in producing the accident. We cannot expect ever to have investigators on the ground at the time of accident, but there might well be some better provision for a later investigation of conditions precedent to the event. Some thought has been given to the sites most prolific of accidents, to the character of the highway at the time, to the existence of traffic signals, to the working capacity of the cars, to the speed of the vehicle, and to the sobriety of the driver; and the resulting conclusions are more than surprising. For instance: twice as many accidents are reported occurring *at the intersection* of cross streets, as oc-

cur *between* those intersections—which would seem to indicate that the jay-walker is justified in crossing at the middle of the block. Most drivers have their accidents in their own home towns, where they are certainly more familiar with conditions than they would be in strange territory, which would seem to indicate gross carelessness; 80% of drivers accountable for accidents have had their trouble in the town in which they lived. Of all accidents reported, 58% have occurred in *broad day light*; 75% occurred on *dry*—not wet—roadways; and the same percentage, 75, happened under *clear* weather conditions. Less than 5% of all accidents are the result of faulty mechanism of the vehicles; the human machine is responsible for 95% of automobile accidents and few people seem to have considered the importance of examining the human part of the automobile driving machinery. Drunkenness or intoxication of the driver has come in generally for a large share of blame; a share which I am convinced has been grossly exaggerated. I would not be understood as excusing anyone for driving while under the influence of liquor, but I would suggest a more careful investigation before denouncing a driver on that score; because it is so easy for the by-stander to mistake for a state of inebriety the mental confusion and bewilderment of the shocked author of an accident.

As to *active causes* of accident, exceeding the speed limit, being on the wrong side of the road, failing to signal the other car, passing street cars or passing on the wrong side of other cars, all have received a due share of recognition and condemnation. The *one outstanding* feature in the results of investigation may be summed up in the very striking statement that in 75% of all accident cases the driver was "going straight through". I wish to emphasize that statement because I believe that in those figures we shall find the most important factor in the causation of automobile deaths. Who are they among drivers that "go straight through", often, very often, regardless of traffic signals and road signs? The speed maniac is doubtless to be considered, but most observers have arrived at the conclusion that speed of itself is not the great source of peril it is presumed to be; that it is speed in connection with other factors, such as negligence, recklessness and unfitness to drive, that is dangerous. The Royal Commission on Transport, in Great Britain, has quite recently recommended abolition of all limitations upon speed, and that in the event of accident it be considered only whether the driver was exceeding a speed reasonably adapted to conditions then and there existing. The road hog certainly must come in for a share of blame, but he constitutes only a small percentage of all the drivers associated with accidents.

I believe we shall find that the "straight through", dangerous driving, group is composed very largely of persons who should never have been given a license to drive; persons with bad eyes, bad ears, bad feet, bad hearts, bad nerves and a poor quality of brain. In other words, I am personally convinced that the great destruction of human life annually produced by automobile accidents is due in the main to the issuance of drivers' licenses to persons *unfit* to be entrusted with such responsibilities.

Let us inquire under what conditions a license to drive an automobile may be obtained. Only 20 out of our 48 states have any laws whatever governing the issuance of licenses to drive automobiles, and in those 20 states the laws vary greatly. In all of those 20 states, and in the District of

Columbia, prospective drivers are required to show a sufficient degree of literacy to justify the belief that they can read road-signs. The only other test of a preliminary character, in which those states are in general agreement, consists of a demonstration that the individual can start, guide, turn and stop his car; for, though the tests legally required in those states would seem to call for an adequate test of driving ability, the actual tests are frequently so hastily and so carelessly conducted that the examiner cannot possibly determine the prospective driver's ability even to handle the machine under the best of conditions. As to any examination of physical fitness, there seems to be no general agreement upon anything more than a visual form test, and no suitable provision for proper visual tests in any of those states.

The 3 states with which we are concerned in this conference stand among the most advanced in legal requirements for licensing but even they leave much to be desired. New York, Pennsylvania and New Jersey motor vehicle licensing bodies require applicants to pass examinations—oral in New York and Pennsylvania, written in New Jersey—on the rules of the road and knowledge of mechanism of the car sufficient to enable the applicant to operate it, and practical tests on the street "to start and stop successfully, especially on a hill, and to back up and turn around properly". The total time devoted to such examinations averages 10 minutes for each applicant, divided into 5 minutes for the oral or written examination and 5 minutes for the practical demonstration. While an average of 25% of applicants fail on first examination, the number of applicants ultimately refused licenses is well below 5%. Practically speaking, execution of the law has resolved itself into selling drivers' licenses at fixed fees, varying in the different states from \$1-\$5, and annual renewal of licenses amounts to exaction of one form of state taxation. The so-called "Uniform Driver's License Act", which is operative in all 3 of these states, says that: "The Department shall examine every applicant for an operator's or chauffeur's license, before issuing any such license, as to his physical and mental qualifications to operate a motor vehicle in such manner as not to jeopardize the safety of persons or property and as to whether any facts exist which would bar the issue of a license." The law does not state of what these examinations shall consist and, as already pointed out, the examinations as ordinarily conducted are in the nature of a farce. The law as it stands is sufficiently broad to cover all that is required; what is needed is better application and execution of the existing laws. In each state the motor vehicle commissioner has power to institute proper and adequate forms of examination; what each commissioner needs is a proper standard of examination to be established and put into operation, and, perhaps, some strong body of public opinion to support him in the exactions of such examinations. Herein, it seems to me, lies our opportunity for public service.

On this subject, the New York Times of Sunday, January 5, 1930, in a very able article written by Mr. Harry Tucker, Professor of Highway Engineering, North Carolina State College of Agriculture and Engineering, said: "Power and speed are the features in the design of new automobiles and trucks which some manufacturers emphasize most in their advertisements; and power and speed seem to be the most popular selling points with automobile salesmen. Yet these powerful machines are put into the hands of anyone who has strength

enough to hold a steering wheel and to push on an accelerator. They are sent hurriedly along crowded streets and highways at a greater velocity than closely supervised and carefully operated railroad express trains. \* \* \* A number of states now have laws requiring the licensing of drivers of motor vehicles. If the requirements were carried out strictly and only persons who are physically capable and mentally alert received licenses, such laws would undoubtedly tend to reduce the number of accidents. Unfortunately, in many cases rigid examination is not given and a driver's license is issued to anyone who has the required fee. \* \* \* Practical laws, strictly enforced, would certainly make automobile travel safer for all concerned. And it would seem that traffic laws ought to be uniform, since the automobile and good roads have made us a nation of tourists. But, the mere enactment of laws will not prevent motor vehicle accidents."

Is it our duty, as physicians, to take action upon this question? I think it is. Who is in better position than the physician to recognize the needs of the situation and to offer the proper remedy? I recall an editorial in the Rhode Island Medical Journal of October 1924, which said in part: "Is it not time for the medical profession to take an active stand in a matter which so deeply concerns the safety and welfare of the state—namely, in the insistence upon more careful examination of applicants for license to drive motor vehicles? This important matter is one in which physicians are concerned not merely in the rôle of protectors of public safety, but because a medical principle is involved, that is, some medical examination of applicants for license. Is it fair to have men and women licensed to drive automobiles who are color-blind, who have serious defects of vision, who are feeble-minded or suffering from mental disease?"

The Indiana Medical Journal carried a similar editorial in November 1928, concluding with the statements: "At present we permit the feeble-minded, the poor-sighted, the crippled and the underaged to drive over our city streets and country roads automobiles, everyone of which may be considered high-powered and capable of making high speed. However, it is not speed alone which causes these misfits to have accidents. Instead of establishing speed limits we ought to establish driving tests and insist upon the examination of every person who would drive an automobile."

The New England Medical Journal of March 7, 1929, urging action by physicians, said: "Intelligence, caution, courtesy and equilibrium, added to good physical condition, are requisite to enable one to operate an automobile with safety to himself and others. \* \* \* Has not the time come when every applicant for a driver's license should pass a physical examination, and be obliged to be again examined after a period of years (for no one can say that he will indefinitely remain physically fit)? Who can suggest these requirements better than the physicians."

The Literary Digest of July 23, 1927, carried an article entitled "When the Auto Knows More Than The Driver", from which I have culled the following: "Cars are now built for an intelligence that their drivers do not possess; 50 mile an hour cars are run by 20 mile an hour people; the public, 50% of which is incompetent to drive a car at all—these are the things that are making automobiles juggernauts and our highways places of slaughter. \* \* \* When we look carefully at the world on wheels we can find one great underlying cause which seems to have been overlooked. The cause is not in bad driving. No attention to signals, lack



of control, speeding—none of these so-called causes are enough to explain it. Much deeper is the root from which all these accidents spring—the undeveloped quality of consciousness at the wheel. The drivers of automobiles are unfit, both in mentality and application. The mass of people have had automobiles thrust upon them before they are qualified to use them."

About one year ago, November, 26, 1929, to be exact, the Newark Evening News published the report of an inquiry conducted in 11 states by the Traveler's Insurance Company as to causes of revocation of licenses. The greatest number of cancellations and suspensions was made because of intoxication, but the inquiry showed as a coincident discovery that the proportion of unfit drivers is variously estimated by the State Motor Vehicle Commissioners as between 10 and 15% of those who are licensed; that physical defects are an important feature in the rising growth of traffic disasters; and that 1 out of every 50 motorists suffers from some bodily ailment which interferes with his ability properly to operate a car."

A similar study of the Personnel Research Federation, reported in the Pittsburgh Press, March 23, 1930, shows that serious accidents are limited to about 20% of all drivers and that many of these are repeaters; that is, this 20% of operators is responsible for 45% of all accidents. The question is raised whether such repeaters can be cured, and some experiments indicate that psychologic tests of such persons and proper treatment of their defects may convert a reasonable proportion of them into safe drivers.

This review leads us to ask—what are the principal physical defects that incapacitate one for safe driving? Apparently, the majority of such defects might be grouped under the general heading: defects of vision, including color-blindness; deafness; crippled arms or legs; impaired hearts; unstable nerves; defective mentality. Some reasons in support of this classification, taken from the reports of accidents and gathered from observation, might readily be given. A few years ago one of my patients, so near-sighted that even with correcting glasses he could not possibly have seen an object the size of a man at a distance of 500 yards, secured a driver's license; and I think we all know of drivers who have high degrees of myopia or hypermetropia uncorrected. Consider such a person as the patient I referred to and tell me whether he should have been permitted to drive. A car traveling 60 miles an hour (and that rate of speed is not at all uncommon on our highways) will cover 500 yards—1500 feet—in less than 15 seconds. When that myopic friend realizes that there is a man walking on the road in front of his car, he and that man, both, must recognize the fact, make up their respective minds what each is going to do, and then do it, all in less than 15 seconds. If their minds happen to synchronize, well and good, but, if they are out of harmony, what chance has the pedestrian of escaping injury? Or, suppose another car, traveling at the same rate of speed and under guidance of a similarly defective chauffeur, coming from the opposite direction—is an accident avoidable? Another patient of mine, stone deaf from otosclerosis, holds a license to drive. He cannot hear the traffic-cop's whistle nor the horn signal of a passing car. I know it is customary to say that one depends less upon his ears than his eyes when driving, but experience shows very clearly that a driver needs all of his special senses to be functioning properly. Some would, of course, put forth the argument that an individual deprived of one sense, like hearing,

acquires increased sensitiveness of the other senses, let us say of vision and touch, but I need scarcely waste time with this audience in demolishing that bit of hokum. As a third instance of physical defect, I might cite the case of a licensed driver who has one artificial arm, one artificial leg, and according to her neighbors, a wooden head. She *can* drive her car, but she has proved that she *cannot do so safely* for she has had more than one road accident; yet she continues a menace on the highway. Regarding latent heart disease, epilepsy, unstable nervous systems and defective minds, I am sure you will agree with me that it is unwise to turn such people loose with such dangerous, high-powered instruments of destruction. Such persons are endangering their own lives and the lives of everybody they meet or pass upon the road. How frequently do we read of deaths at the wheel or immediately after leaving the driver's seat of a car? Each report of that kind suggests the idea that at least some accidents occur through the driver's having run amuck because he was suffering at the moment an acute exacerbation of his heart lesion. Nervous and mental elements are perhaps less readily recognized but no physician will doubt that accidents result from a driver's not having been able to coordinate his muscles properly at a critical moment because his nervous system was not functioning properly; his car may have been "hitting on all 6" but his nerve apparatus or his brain was "missing fire". It has been shown in 1 investigation that men over 50 years of age with abnormal blood pressure had on the average more than twice as many accidents as men of the same ages whose blood pressure was normal. Even when not so high as to indicate danger of sudden collapse, high pressure may be a symptom of systemic disease that affects the general health and temperament to an extent that may seriously interfere with safe driving. In all probability it is the true cause of accident much more frequently than any of us suspect. "Asleep at the wheel" is not at all an uncommon explanation of accidents. Not very long ago a prominent English surgeon, driving home from a night operation that followed upon a full day of professional labor, crashed his car against a tree and was killed. He lived long enough to pencil a note on his prescription pad: "It was my fault—I was asleep at the wheel." Some of my friends tell me that often when driving long distances alone they become sleepy and have to draw up beside the road for a short nap. The intelligent driver will do that, but not all drivers are intelligent, and many intelligent ones will take a chance in trying to fight off the sleepy feeling. I have even heard some reckless drivers boast of having driven a car while asleep, which makes me appreciate a witticism in the local paper of 3 days ago, saying: "There was a time when half-wits looked through bars instead of windshields."

The New York Evening Post, in an editorial April 30, 1930, said: "A railroad management which allowed an inexperienced man to drive a locomotive would be regarded as criminal, and yet a locomotive runs on rails and is regulated by a system of signals, whereas on the highway the driver of an automobile does his own regulating. To allow a person to operate a car without having proved his fitness and qualifications is simply to invite accidents."

This reference to railroads recalls to mind the fact that 35 years ago we had this same fight for conservation of human life, with regard to railroad engineers. Some of you will possibly remember how difficult it was to get rid of the color-blind

engineer. Accidents were frequent, people were killed thereby, because the engineer could not properly interpret the signals, could not always definitely distinguish red, green, blue and amber lights. Today no color-blind man can reach the driver's seat of an engine cab; he is disbarred because of his defective vision, and railroad accidents have become rare. But on our highways and public streets, 4 out of every 100 male automobile drivers are color-blind, and 4 out of every 1000 female drivers may be similarly classified. Realize what that means in view of the fact that red and green light signals are now being installed at street and road crossings all over the country and that safe driving depends very largely upon recognition and proper interpretation of those lights. The traffic-cops may not be aware of the fact but color-blindness is the real reason why so many drivers mistake the signal lights and cause him and themselves trouble even if no one else be injured by the mistake.

#### WHAT IS TO BE DONE?

I hope I have made out a case showing the necessity for reasonably strict physical examination of those who seek license to drive an automobile. If I have succeeded, the next question concerns determination of a standard for such examinations. In 1927, I requested the Welfare Committee of the Medical Society of New Jersey to consider this question, and a special committee appointed to do so spent some months at the task and on January 15, 1928, brought in a report which embodied recommendations as to appropriate physical examination to be required as a preliminary to receiving a driver's license, as follows:

#### QUESTIONS TO BE ANSWERED BY APPLICANT FOR DRIVER'S LICENSE

Note: The answers to these questions are partly for the information of the examining physician. Unfavorable answers will not necessarily result in withholding a license.

1. Age?
2. Are you subject to: dizzy spells? fainting attacks? fits or convulsions? pain around the heart?
3. Have you any serious disease of the heart or the kidneys?
4. Have you every had epilepsy?
5. Have you ever had a stroke? or any form of paralysis?
6. Have you any impairment of vision? Is it corrected by glasses?
7. Have you any impairment of hearing?
8. Have you entirely free use of both arms? hands? legs?
9. Have you been examined by a physician during the past year? If so, give name and address of the physician.
10. Are you physically and mentally capable of operating a motor vehicle on the public highways?

I have read and understand these questions, and the answers are true to the best of my knowledge and belief.

(To be signed and sworn to after the physical examination.)

Signature of applicant

Acknowledged under oath before me this day of

, 19

Notary Public.

#### PHYSICAL EXAMINATION

(Answers to be filled in by a physician)

1. Is there evidence of heart disease? If so, what?

2. Systolic blood pressure? (If applicant is over 50 years of age.)

3. Vision: right eye                      left eye  
(Vision must be at least 20/50 in the better eye and 20/200 in the poorer eye, with or without glasses. If less than 20/200 in one eye, the better eye must have at least 20/30 vision.)

4. Is the hearing good?

5. Has the applicant full use of both arms and legs?

I certify that I have today examined an applicant for a driver's license, and consider that he or she is                      physically and mentally fit to operate a motor vehicle on the public highways.

M. D.

Date of license to practice medicine in New Jersey.

It will be noticed that the committee report omitted any reference to color-blindness. That was done because the committee feared that the color-blind test would arouse so much opposition as to endanger adoption of any physical examination. I thoroughly appreciate that point of view, but I do not agree that it carries sufficient weight to justify the decision to put color-blindness aside. I am personally inclined to add to the examination form submitted a requirement for passage of the color-blind test. Last winter I spent a Sunday with a very distinguished attorney who lives in New York City. Late in the afternoon, I requested that a taxi be called to take me to the railroad station, but my host courteously insisted upon driving me there himself in his own car. Rain was not actually falling but the air was full of mist, a light degree of fog. As we approached the first corner on Fifth Avenue, my host interrupted our conversation to say—"Will you please watch the lights for me?" I was surprised at the request but soon recovered my wits sufficiently well to recognize the import of this question. Then he confessed that he was color-blind, that on clear days he managed fairly well to understand the light signals but with fog or rain he was rendered more or less helpless, and on such days was compelled to rely upon watching the movement of other cars in his neighborhood. Needless to say, I was considerably relieved when he unloaded me at the Pennsylvania Station. As a former practitioner of ophthalmology, and as an interested observer of automobile drivers, I am personally convinced that color-blindness plays an important part in the causation of road accidents. As Dr. Bulson pointed out, in an editorial in the Indiana State Society Journal: "It may be true that the color-blind individual with otherwise normal vision may differentiate between "stop" and "go" lights by their position rather than by their color, but such an individual is hopelessly lost if he drives in a strange city or even in his own city where the relative position of red and green lights may be varied from time to time."

I presume you are all familiar with the action taken by the House of Delegates of the American Medical Association at the recent meeting in Detroit, calling upon our state societies to aid in bringing about some form of physical examination as precedent to licensing automobile drivers, and submitting recommendations covering such an examination. I am perfectly willing to accept the form of examination presented by the American Medical Association, with the exception that, as I stated with reference to the New Jersey Medical Society recommendation, I would advocate insertion of the color-blind test.

It matters not what physical examination requirements we recommend, there will be objections



made against their adoption and application. The color-blind, the near-sighted, the deaf, the epileptics, the unfortunates with artificial limbs, will each and all demand exemption. It may interest you to know that one of our states now has a special law that specifically forbids the motor vehicle commissioner to refuse a driver's license to a deaf-mute. We all know, of course, how such special legislation gets on the statute books, but it is our duty to prevent such laws when we can and, particularly, to recommend proper legislation designed to safeguard public welfare and to effect the greatest good to the greatest number. The objectors must be dealt with in the interest of the larger number of citizens. On the whole, there would be less objection than we may fear, and such objection as will be made can be overcome by presenting the public with the real facts.

My request of you today is, provided you accept in principle my conclusions, that this Tristate Conference shall recommend to our 3 state medical societies such action as you may deem proper toward securing uniform regulations governing physical examination of automobile drivers, preliminary to the issuance of a driver's license, and strict enforcement of such regulations. To that end, I am offering a resolution for your consideration and I trust that it may be adopted. In conclusion, I would like to bring your minds back to a picture of the results of an automobile killing and ask you to remember that this picture, in only slightly varied forms, has been multiplied 33,000 times in the United States during the past 12 months. The picture was painted by the Philadelphia Citizen's Safety Committee and reads as follows:

"THINK, DRIVER, THINK!"

A wave of the hand, a kiss blown on the breeze—from the sweetest little pal in all the world.

I stood for some moments watching her, a chubby little figure in blue and white, an extremely important little person on her way to school.

And then she turned the corner.

It must have been about 4 o'clock—my mind has been sort of deadened since—that the boss sent for me. 'Bob', said he, laying his hand on my shoulder, 'there's been an accident and you'd better hurry up to the house'.

Well, there isn't much more to tell. That little pal of mine—she—she wasn't at the window watching for me as usual. For an instant I faltered; it just seemed as though something within me went dead, and I had to fight for breath.

In a little time I went out to the gate, just as I had that very morning. And I looked down the street as best I could. Right over there, a short block away, was where she turned the corner—passed forever out of my life.

Today, it was my little girl. Tomorrow, or next day, it will be some other little pal quite as dear. And so on, and on, until the conscience of men shall cry a halt to this passion for fast driving in localities where danger, obvious danger, stares drivers plumb in the eye."

Gentlemen, lest you think this closing a bit melodramatic, let me remind you that *during the 45 minutes I have been occupied in reading this paper to you, 3 American citizens have been killed, and 29,700 American citizens have been injured in automobile accidents.*

#### DISCUSSION

*Dr. William H. Ross:* One of the striking thoughts that came to my mind after Dr. Reik finished this rather impressive presentation was that his remarks were followed by *silence*. Usually,

after any presentation so true and so striking as this, applause follows. But today the profoundness of the impression produced was so great that it caused silence, and that is a very interesting fact. Analyzing my own reaction, I was not at all in the mood to applaud because the whole subject seemed so serious. We have perhaps gotten into that frame of mind because he brought home to us the effect of things with which we are so familiar; we know all these things and yet we just complacently go on. Frankly, I wondered just what was going to be said, when this subject was announced, until a second thought brought home the importance of it, but in no sense have I ever grasped the great importance of the subject as I do at this minute. Perhaps the situation is just the same as it is in other things of life. The average person is subject to so many dangers that he pays no attention to until he is hit on the head. I should appreciate this situation as much as any other human being because I have had to bear the application of it to 2 members of my own family who stand dearest and nearest to me, and under the surface I carry a sorrow that I will have all of my life.

There are some rather interesting things in this connection. I have a niece, a deaf-mute, who has a splendid mind. She graduated at the head of her class in college and was signaled out and given a diploma alone because they wanted to say that she was the best loved individual in the college. She is a librarian in a city, and has a license to drive a car and drives anywhere across the state. She has never had an accident nor come anywhere near one. It is an interesting reflection, whether her intelligent mind keeps her from having accidents or whether she is stimulated to more closely observe the signals, but I would rather ride with her than with some of my friends who have no conception of their physical limitations. However, there have been a sufficient number of accidents and deaths to urge us, as the guardians of health, to present effective arguments to the authorities for correction. It is true, as the speaker said, that the medical profession has an opportunity here for service and as the situation stands at the present time we could present whatever we have because we have facts to prove our contentions.

*Dr. Ross V. Patterson:* I was very much interested in the subject and in the admirable presentation of it by Dr. Reik. It is not a subject to which I have given much thought but as he read his paper a number of reflections came to me. The paper is, of course, an argument for medical examination and I am in thorough accord with his view that there should be such an examination. It seems, to me, however, that we must recognize that this would correct only a certain number of the causes of accidents. The paper stresses medical defects as the cause of accidents. As medical men I think we should be more restrained in urging medical examinations as being the solution of the whole question; we should recognize the fact that this is only a part solution.

Dr. Reik speaks of the large number of accidents in this country. I wonder whether he can give us any figures as to accidents in other countries and the relative number of cars; whether there is a disproportion of accidents to cars in use. The reason we have such a large number of accidents is because of our 120,000,000 population and 20,000,000 cars in the United States of America; more than all the other countries in the world put together.

So far as Pennsylvania is concerned, we have a motor vehicle law which states that there shall not be more than 3 riders on the front seat, and very frequently you will see 4, and the other day on a street in Philadelphia I saw a little runabout with 8 people in it. That was contrary to all reason, of course, but for 6 or 7 blocks I trailed back of the car and we passed 5 traffic officers who said nothing about it. You will frequently see that sort of thing at night.

I have always been impressed by instances of automobiles driving into the city around 6 p. m. to get the "head of the house", having a small boy, apparently under the legal age, driving the car with a chauffeur sitting beside him. I have mentioned that to the traffic officers and they have said that sometimes the man has a greater political pull than they have and they cannot lose the time to go to the magistrate's hearing and have therefore passed it up. That is a potential source of danger, of course.

The question of insurance is a very great feature in automobile accidents. The insurance rates are increasing each year. There are a number of automobile drivers who take the attitude that the insurance companies will adjust the accident no matter what happens, so they ignore all the laws of common decency of traffic. That seems to be a very large source of automobile accidents today.

As to the question of being asleep at the wheel. I think that occurs more frequently than we are cognizant of. I remember, 2 years ago, going to sleep at the wheel while driving up the Roosevelt Boulevard. I found myself in the gutter twice and finally pulled up along side the road, locked myself in the car and went to sleep. I had been asleep about an hour when a park officer rattled the door and asked why I had locked it. I told him that I found myself going to sleep and I pulled up to protect the public and locked the door to protect myself. He saw the green cross on the front of the car and said I would have to explain this. I called up a friend of mine, explained the whole situation, and he said he would take care of it for me. It was just a humiliation, under the circumstances, but I was trying to protect the public by getting out of potential danger.

The question of "going through the red lights" raised by Dr. Reik: we find that is a frequent occurrence in Philadelphia. At 33rd Street, especially, I have seen cars time and time again going through the red signals. It is not particularly because the drivers are color-blind but they are simply blind to the lights. We had a very disastrous situation in Pennsylvania recently. One of our surgeons was on his way to Philadelphia to see a young girl who had been operated upon and who was not doing well. They telephoned the father to come to Philadelphia to see his daughter. The father was driving the car and beside him in the front seat was the physician, Dr. Holden, who was Chief Surgeon of the Locust Mountain Hospital. On the rear seat was the girl's mother and grandmother. Driving down the Highway, about 8.30 p. m., there was a truck stalled along the side of the road. Whether there was a rear light on the truck we do not know but there was a sudden crash and the automobile drove head-on into the rear of the truck. The doctor was instantly killed; also, the father and the mother and grandmother died shortly after reaching the hospital. Our feeling is that the gentleman driving the car was talking to the people in the back seat and his eyes were not in front of him, and they were no doubt traveling at a rapid rate of speed.

Regarding defects of hearing, I may speak personally. I find that while riding in an automobile I can hear better than I can in a room and that condition, of course, is well known to the medical profession. However, I cannot hear very well at times and must depend upon the officer's whistle. I was recently crossing one intersecting street in Philadelphia and saw the officer put his hand up to his mouth and then take it down, and I thought he had blown his whistle, so started across. He stopped me and "bawled me out". He had intended to blow his whistle but did not because he decided to let a truck go through. I did not argue that I had an impairment of hearing.

I understand there is a law in France regarding pedestrians crossing the street, that frequently they are arrested for walking into automobiles and are fined when they are at fault. Very often accidents are due to the carelessness of the pedestrians.

Week-end drivers also present a serious question. So many factors have to be taken into consideration. Those of us accustomed to driving on the streets every day realize these factors. Many of the dangerous drivers do not drive a car at any other time than on Sunday and have little experience.

There seems to be a marked tendency everywhere you drive for automobile drivers to demand the right of way whether they are entitled to it or not, which in many instances is responsible for accidents, so that the careful driver is being penalized to give the right of way on all occasions, in order to play safe. The right of way seems to be demanded in Pennsylvania to a greater extent than ever, notwithstanding the fact that a few months ago the Supreme Court of Pennsylvania issued an opinion on the automobile law of the state to the effect that the driver of an automobile has right of way over another car coming to his left, and that the car coming to his left cannot claim the right of way by blowing his horn, or by the fact that he arrived at the intersection first. It would seem that many of the automobile drivers in Pennsylvania do not know this ruling of our Supreme Court, because they persistently ignore the question of right of way, or they are demanding the right of way regardless.

I think Dr. Reik's paper is excellent and I sincerely trust that the resolution he has presented will be adopted. I think we should go on record as to the feeling on the part of the medical profession in this regard.

*Dr. A. C. Morgan:* The reader of the paper stated that 95% of the fault and responsibility for accidents has been shown to lie in the human element in driving, therefore this is an entirely proper paper for presentation before this body for our serious discussion. There are many laws on the statute books now that are not being enforced. It is proper that additional remedial legislation shall be presented for consideration by our Legislatures if these points are not already covered. The important point for us to consider is to find modes of approach to impress upon these examiners of motor vehicles of the 3 states the importance of recognizing the fact that medical cooperation and medical advice are paramount in value to the imposition of rules and regulations upon those who apply for registration. This would concern itself in preparing questionnaires to be answered by the applicants in writing, and perhaps requiring the photograph of the applicant to be attached to necessary papers. We should demand a statement from the applicant in respect to fainting, epilepsy



Another thing which Dr. Reik's paper does not stress, but a fact of which we are all aware, is the carelessness of pedestrians; and I wonder if it would be wise to urge that all pedestrians be given a medical examination to determine their fitness to be on the streets? Abroad this summer I traveled 3000 miles in an automobile, in 4 different countries, and one of the things that very forcibly struck me, particularly in England, was the amount of *road-courtesy* as compared with our own country, and I think that must be a very considerable factor in lessening accidents in England where the roads are narrow, tortuous, and where there is no speed limit. There is the greatest amount of road courtesy. The driver ahead, when signaled, will instantly pull over. He will hold out a hand to notify the individual behind him that the road is not clear and he, being in front, can see farther ahead, and will motion him to go ahead when the road is clear and he can get by safely. There is the greatest difference in our own country.

In Switzerland, as you doubtless know, they enforce a different speed law on Sunday from that of other days. During the week there seems to be little regard to the speed which an automobile may attain but on Sundays, when the road is crowded with pedestrians, bicycles, and motorcycles, the speed is rigidly cut down to 20 miles an hour.

Better enforcement of our laws, better education of the pedestrian, are all parts of the problem and as medical men we may contribute something, but I should feel that we ought to be careful not to claim that a physical examination, valuable though it is, would be more than a partial solution of the problem and in that view I am sure the author of the paper will concur.

*Dr. Vander Veer:* This comes into my personal knowledge with one experience. I have a relative who drives a car but who has vision in only one eye. She obtained her license after 2 examinations but it was only the mechanical manipulation of the car that troubled her. There is a very excellent Examiner in Albany County who is in a measure economically free from pressure of politics. He is a rather hard-boiled individual. He remarked about her having no vision in one eye, as she had made that statement on her card of application. However, she had sufficient corrected vision in the other eye to pass the 20 foot card test given in the street along the curbstone.

A man whom I attended as a patient in the Albany Hospital some 20 years ago, amputating his leg, has a wooden leg and a contrivance on his car so that he may work it. When he got out of the car to take the examination he was told that he had illegally driven his car down there and was also told he could not pass the test because he had a wooden leg. The examiner was invited to get into the car and see the mechanical changes that had been made to accommodate the wooden leg, and the man was given a license. I have another patient who is absolutely deaf, and who passed the examination by reading the lips of the examiner. I do not believe the examiner knows that man is deaf.

I know one gentleman in Albany who is apparently intelligent enough to fill a position in the state service, who has had 3 accidents with his car, once a very grave accident that had visible results by reason of his face being cut up. He took 3 or 4 examinations before passing the test, because he could not grasp the mechanics of the car although he occupies a position requiring educational ability. His secretary, a very intelligent woman, woke up one night in the ditch, having

fallen asleep while driving. Fortunately, she was not going very fast and the car was upright. She had a nonshatterable glass windshield, but the wheel was broken in 3 places. Those are personal experiences that have come within the range of my knowledge.

There is no gainsaying the fact that we should try to do something to better these conditions. The National Association of Engineers saw the light because it was put up to them in the proper way. I am Vice-President of our Albany County Automobile Club. The question of the modification of our laws in the state of New York came up some years ago and I was in a very marked minority in our Executive Committee when I advocated a rather harsh type of physical examination before the person appeared for the mechanical examination. The vote of the 15 members of the Board was 13 to 2 and as a result the State Automobile Association turned the proposition down and it did not get to the State Automobile Bureau. I know our State Commissioner of the Automobile Bureau very well and I also know his assistant commissioners. They are rather in favor of this and yet the pressure that is brought to bear on them by the thousands of automobilists in the state and by the County Automobile Association is great; so that pressure brought to bear upon them by the other group does not get very far. A large number of applicants are turned down at the first examination; most of these, however, because of the mechanical features; very few because of physical defects.

Quite recently there has been a scandal going on in New York State in that a number of people were taking examinations for others, so that now for a chauffeur's examination one must present a picture of himself which is fastened to the card. We have not been able to have it made obligatory that each operator should have his picture on the application blank and on his card in New York State because political pressure has been brought to bear and consequently we find scandals creeping out here and there and as a result a number of people who fail in one county go to another and take the examination, and also other individuals take the examination for them.

There is no gainsaying the fact that now seems to be a proper time when we should determine some complaints as to the automobile deaths and as physicians try to obviate them even if in only this one little point.

*Dr. Frank C. Hammond:* I think this is a very timely subject that Dr. Reik has brought up for discussion at this Conference and I do not know any group more fitted than the medical men to bring this matter before the Legislatures and I hope the suggestion presented by Dr. Reik will be adopted. It seems to me that this question brings up so many angles for discussion: first and primarily, the question of the traffic officers enforcing the law. We have so many laws that are not enforced and if they were enforced to a greater extent a great many conditions might be overcome. Those who drive automobiles on the street every day are conscious of the fact that traffic officers do not enforce the law. I have taken this matter up with some traffic officers and they say that when they report any one to the City Hall in Philadelphia they are compelled to appear before the magistrate at 7 o'clock in the morning, the magistrate not arriving until 8 or 9 o'clock, and they have to lose that time to be present at the hearing and for that reason frequently do not report infringements of the law.

and previous accidents sustained, occupation and perhaps other facts.

Dr. Reik emphasized the fact that most accidents occur between 5 and 6 p. m. That bears out the study being carried on in this country particularly, and in other countries, in regard to the accidents in mines, in mills, on the streets and the occurrence of falls. For a few years past I have been interested in the subject of falls and their causes and their application to the medical profession. That, of course, is from a medical internist's standpoint, and yet I feel that it has a very valuable bearing on this subject before the house today. There are some people who tire very easily, mentally and physically, making them relatively unsafe to drive their cars or to have any responsibility that incurs the possibility of danger to other people. This is a strictly medical and properly a medical phase of the subject that can be discussed with the State Commissioners of Vehicles. Dr. Hoffman, the eminent statistician, is carrying on some very valuable work along this line.

There is a very important point for us to consider as medical men, and that is to have unanimity as to what constitutes intoxication. We will find definitions quite variable, and likewise the testimony of the man who examines an individual and pronounces him drunk today may be changed after he sleeps over it and has a telephone call or a visit from a politician, as I have had reason to experience as one who made charges and then had the medical man reverse himself the next day in what I considered to be a wanton case of drunkenness.

Epilepsy is another feature that should be stressed. I know of a very eminent physician who while driving along the River Valley in New York suddenly awakened in a little ravine; his wife was dead, his boy escaped injury, and the father was so crippled that he could not get out of the car. The little boy had presence of mind to run back to a small place and summon help. This sad accident was not explained satisfactorily for 2 years, when the doctor eventually died of a brain tumor. He had a sudden faintness and loss of consciousness because of the beginning pressure of that brain tumor. Autopsy revealed the presence of this brain tumor and then in retrospect the cause of that accident was made clear.

The matter of blood pressure should be emphasized again by us in discussion of all periodic health examinations, particularly the marked importance of *hypotension*. A man with hypotension is, theoretically at least, potentially more likely to develop fainting than a man with hypertension. The man with hypertension is more likely to have fits of anger and disturbance of equilibrium and mental poise, and both phases of this blood pressure question are questions to discuss in respect to the ability of a man to drive a car.

Another important thing: It is proper to require an examination for fitness at the time that one makes an application, but there should be as a medical requirement a demand that every 3 to 5 years when the applicant applies for re-license he shall likewise be subject to a re-examination, because physical alterations do occur and might greatly influence a man's fitness as a driver. Those of you who have reached the age of 60 will recall that in your insurance policies at the age of 60 your rate of premium is greatly increased. It is rather astounding and rather jarring to have that fact made known, that the insurance carriers realize this and raise the premium of those who are carrying accident insurance after the age of 60. This is a proper thing for discussion in putting

this phase of the problem before the Commissioners of Vehicles for their legislation.

A year ago an engine driver was taken from one of the speed trains leading into Atlantic City. His brother before him was a cardiac case and had dropped dead on the street. This man was exactly the same age as his brother had been when he died. He went up for a physical examination before the railroad medical officials and was taken off the speed line and put on a shifting engine in one of the railroad yards. This man had a slight accident and was taken off that job and simply used as a guide or flagman. The patient was referred to me and my opinion was expressed that he was not a safe man to drive an engine. A couple of months ago I learned that with political pull in a certain part of New Jersey that man is back on a shifting engine in the yard. I shall be interested in the further progress of that case. It is proper for us to study as medical men the occurrence of previous accidents so that the answer to Dr. Reik's question as to why the person was at fault, why that accident occurred, should be settled not from the line of mechanics alone, which has to do with brakes, with laws, etc., but also with respect to the physical and mental condition of the individual at the wheel.

There are many points that occur to me but I feel that they can be better discussed in round table conference, but I am strongly convinced that our easiest, shortest and best way to approach this subject for the present is to get in touch with the Examiners of Vehicles; if you please, give them transcripts of our meeting here today, have them put in reprint form so that the Commissioners, the heads of departments, members of Boards in the respective states shall be given the printed suggestions, and later ask for a conference. Or, put them in the hands of the family physicians and reach these men as men rather than officials, and I think we will accomplish more good for the people of our commonwealths in a shorter time than by resorting to legislation which, as you know, it requires many years to accomplish.

*Dr. Joseph S. Lawrence:* I want to add my expression of appreciation of this splendid paper that Dr. Reik has given us on a very timely subject. We are the proper persons to give consideration to this subject, I believe, and the proper group to initiate some further consideration of it on the part of the public because we are the ones who are always called in to salvage the wreckage of the human side of it. Dr. Reik gave such evidence of admirable study of the subject that I hesitate to make any suggestions with regard to the points that he did not mention for fear that he considered them of minor importance, but from my own personal experience in a near-accident I cannot help but mention that a certain proportion of these accidents are due, as has been stated by each of the speakers, to a weakness on the part of the pedestrian. About a year ago I came within close proximity to running down, or killing, a child about 4 years old. About 6 o'clock in the evening I was driving at not more than 25 miles an hour when I saw a child on the curb who apparently saw me. When within 2 cars' length, suddenly the child ran out in front of my car. I was fortunately able to turn the car across the street without upsetting it, and escaped the child.

I also think of another factor, which was mentioned once, and that is the condition of some cars that are out on the roads. We have, of course, our efforts at checking up on the brakes, etc., but even if right one day they may not be right the next day. Many people do take liberties on



account of the confidence they have after having had their brakes checked and they keep the slips on their windshield often for 6 months to show that their brakes were examined.

With regard to the correction of some of these difficulties, it is a question whether we could get legislation for 5 years and maybe 10 years. At any rate, it is a question whether we could do it without the full hearted coöperation of the automobile associations of our several states and of the national one. I have found in my experience with the Legislature in New York that when matters relating to automobiles, and even certain conditions of the highway, are under consideration the opinion of the Automobile Association is very influential. They attend hearings in large masses and usually have as their representatives influential persons, and I believe that whatever we do we must seek the coöperation of the Automobile Associations.

Now, I wonder if we would not make more rapid progress if, instead of an extensive examination such as suggested, we simply asked for inclusion in the examination that is now given of one or two more particulars. For instance, I am very much impressed by what Dr. Reik has said about color-blindness. If a certain percentage of the men are color-blind and they are in a hurry to make time, a red light would mean nothing to them and they would be the ones who would pass the red lights, especially in strange communities. However, it was pointed out that the majority of accidents occur in one's home community, and that is true in all accident experiences. I sold accident insurance at one time and the most frequent place of accidents was one's own home; the most intelligent person, the minister or doctor, was sure to fall over his own doorstep. I think if we could secure inclusion in the examination of the test for color-blindness, or the eyesight test, and also the exceedingly evident condition of epilepsy, it would be a good thing to accomplish. Those 2 conditions can always be proved as existing. If we could add these 2 conditions, which could not be changed, and in time add 2 or 3 more, this could be done with comparative ease I believe.

*Dr. William T. Sharpless:* I think this discussion is very timely and Dr. Reik's paper has made a very deep impression upon us. My feeling is that while there are a great many matters that might be corrected by a physical examination, from my own observation a great many accidents have occurred from wilful disregard of the signals. That is not because of color-blindness or inability to use either hands or legs, nor because of any sort of physical defect, but simply because they wilfully disregard signals. It is just a part of the sheer disregard of law that is so common in all classes of society at present.

Dr. Morgan spoke of the shock that he got when he learned that at the age of 60 his rate for accident insurance would be increased. Wait until he comes to be 70 and he will have no accident insurance at all.

I think those objecting to this law would not be the people who are driving cars, so much as the people who are selling and manufacturing cars, because the restriction of those driving would certainly restrict the sale of cars and I believe we would have some difficulty from that source. Again, they would say that the doctors are working up something for their own benefit, that they are increasing work for themselves and are not so much interested in the protection of the public as in their own benefit; some people are evil-minded enough to do that.

I know a man, a doctor, who had the full use of his faculties, and of his arms and legs, who was run down by a trolley car and his arm so injured that it had to be amputated at the shoulder. He had had accidents previous to that but since his arm was amputated he has had no further accidents, perhaps because it has taught him a lesson and he is now more careful. Previously his carelessness had killed that very efficiency which should have been a safeguard against accidents.

*Dr. Walter F. Donaldson:* I do not believe there is any point of this discussion that has not been touched upon either by the essayist or those taking part in the discussion, but no one has yet said that it should be accentuated that when drivers approach crossings, feeling confident that they have the right of way, they should always stop long enough to ponder that possibly the other man, coming in the other direction, does not realize that he has not the right of way. In other words, we should not consider that we have the right of way or will receive the right of way. I was driven 90 miles within 70 minutes by a very good chauffeur recently and I am sure that we covered that distance in absolute safety because this driver, although he had no speed limit, yet when he saw a vehicle or a pedestrian was much more careful to slow down before any accident could possibly happen.

I am in perfect sympathy with what Dr. Reik has said to us today and I am sure that his paper once within our possession in printed form will become a matter of reference for many years, just as a paper of Dr. Ross' prepared for this conference has taken that position, and I am perfectly willing to go back to my State Society and help to bring about this ideal situation. I know that Dr. Reik does not expect that we will accomplish much immediately but I am sure that it is our duty to keep driving away on this point because no one else will do it, and no one will expect more physical restrictions to be put upon this thing than the doctors of the state think should be put upon it. I am in favor of putting it on a bit heavy with the hope that 35 or 40% may be accepted, and we might be well satisfied for that year. We probably represent 35,000 practicing physicians and 35,000 motorists and we might urge our own motorists to become practitioners of the Golden Rule. Common courtesy of the road cannot come to a boy or to a foreigner or to an individual who has not had the good fortune to have lived in the days before automobiles became so common and when people did know and practice ordinary vehicular road courtesy. Unless a person has had that good fortune, then somebody else must teach it to him. We cannot expect a foreigner to our shores who has been here but a few years, and never before dreamed of the day that he would be able to own even a wheelbarrow, suddenly put into possession of this tremendous engine of destruction—we cannot expect him to look out for the niceties of driving unless he has a mighty good example set to him and has the force of the law occasionally brought to his attention.

*Motion.* I herewith move that this resolution as proposed by Dr. Reik be adopted.

*Dr. George N. J. Sommer:* My reflections are from the standpoint of the visiting surgeon of a hospital and what occurs in our immediate neighborhood, at Trenton, in the way of major accidents. We have 2 very dangerous zones. One is Langhorne and the other lies about Bordentown, in New Jersey, on the direct line to New York. As you know,

there has been built a new direct highway to New York which shortens the time of travel very materially. It is a 3 lane highway. A big truck will sometimes stop on 1 of those lanes and at once you have set a scene for a tragedy, which often occurs. Quite recently a prominent surgeon was on his way home, Thanksgiving Evening, and a car was going through Trenton with some prominent people in it who were going at a pretty good rate of speed. A big truck was standing, or moving slowly, in one of the lanes. I do not know whether another car was occupying the third lane but the car that tried to pass, in trying to avoid the other car, collided. The doctor was instantly killed, and the wife, son and daughter injured; the occupants of the other car suffered a fractured arm, a fractured leg and sundry cuts and damages; the chauffeur had some scalp wounds plus a few broken ribs. Now, that is one of the dangers of the sectional highways over which there is a tremendous lot of traffic. I can testify to what dangerous things these large trucks are. Quite often you will find them parked alongside the road, and their signal lights are under the car and are hard to see. I noticed recently that some of them have several lights on the rear now and 3 or 4 in the front, but the average truck is a huge menace to the motorist and they are all terribly fearful of the presence of these large trucks, so that a 3 lane highway introduces now a new problem in road building. There will have to be 4 lanes, or highways in only 1 direction, in order to avoid 1 great element of danger in road traffic.

As to the question of epilepsy, a friend of mine went South about a year ago with a chauffeur. It happened that they took a physician along also. They had several near accidents and then it was discovered that this man had minor epilepsy and at times had suffered with temporary lapses of consciousness. Another friend was crossing the Five Points, in Trenton, where there is a silent policeman in the center. At 1 o'clock in the morning he went head-on into that signal. It developed that he had previously had a number of seizures.

Not long ago a traffic officer called my attention to the fact that my chauffeur had passed the signal several times. He is about 60 years old and I found that he had retinal hemorrhages.

Certainly these suggestions that examination should be made every few years are good because many conditions arise in the course of 5 years that might convert one from a safe into a dangerous automobile driver. I am in sympathy with the step that drivers should be known to be in good health and not a direct menace in so far as their physical health is concerned. In regard to their ideas of road courtesy and politeness, as I see it, there is not any courtesy or politeness in the minds of most automobile drivers. All they think about is to blow their horns and get you out of the road, having not even a reasonable doubt in mind that you may not be doing something sensible for him.

*Dr. Henry O. Reik (Closing):* I am very grateful for the free discussion of my paper. Regarding the various defects that I have mentioned, and some Dr. Ross has cited, particularly the deaf-mute who is an exceedingly capable driver, I want to make it clear that while I referred sarcastically to that special bit of legislation, I did not mean to imply that the privilege of driving should *always* be refused because of deafmutism, but that I did not approve of giving them a license because of deafmutism. Then, as to deafness, I would far rather ride with Dr. Hammond, handicapped as he is, than to ride with a man having perfect hearing but an imperfect sense of responsibilities.

Dr. Patterson spoke of the discourtesy of the road. I also happened this past year to have done a good deal of riding in England, Ireland, Wales and France. The courtesy of the road in England is one of the most striking things one notices. In France the situation is somewhat peculiar. Of course I have heard a great many complaints in every city of the taxi-cab drivers and bus drivers but my observation has led me to believe that, as a class, they are about the safest drivers we have to deal with. In France, that is particularly true. The French taxi-cab driver is about the best one-hand driver in the world; whereas I found that private citizens did all sorts of things that were in violation of the law. The French have no speed limit but have very strict laws and immediate punishment if you have an accident. In France, on the general highways the courtesy extended by drivers of public vehicles is very marked, but it is just as marked that the private citizens extend no courtesy to one another. I think they are about the worst lot of drivers I have ever encountered. I traveled on many buses in Brittany this summer and these drivers were always ready to give way to another vehicle, but the private driver was hogging the road whenever he could.

As to the relative proportion of accidents compared to the number of cars, it is said to hold good that there is about a relative proportion of accidents in the various countries, so that it would seem that it deals very largely with the human factor in driving cars. The only country in which there is strict physical examination—and it has had a bearing on the prevention or reduction of accidents—is Holland.

Dr. Lawrence misunderstood me in thinking that I was suggesting any new legislation. I said that in these 3 states I believe there is no extra legislation necessary. The motor licensing bodies are clothed at present with sufficient power but what they need is moral support. They are afraid of the great number of defectives, the automobile clubs, and more particularly of the automobile salesmen who do not want anything to restrict their possible number of sales.

My feeling is that Dr. Lawrence, Dr. Morgan and Dr. Hammond have all urged just what I meant to say in my paper, that the thing to do in each state is to bring our influence to bear upon the Commissioner of Motor Vehicles. He has at hand sufficient law at present to put these things into force. As to what the character of the physical examination should be, this plan was suggested by a committee in our Society and was drawn up as the simplest applicable form. We tried to avoid the charge that we were trying to make business for ourselves. Of course, if it calls for physical examinations it will indirectly make business for some doctors but we do not want to ask to have physicians at these bureaus to make the examination.

I have no notion Dr. Patterson, that this would prevent *all* automobile accidents but I do think it would prevent a *goodly* number. Persons will still do foolish things on the road, will wilfully disregard lights, etc., which we cannot prevent but we can contribute something. Statistics seem to show, Dr. Lawrence, that defective machines account for only 5% of the accidents; I suspect there must be a larger proportion than that, but those are the statistics gathered at the time or immediately after accidents, and of course at such time each man will swear that his machine was in perfect order, and often you cannot tell after the wreck whether the car was previously in good condition or not. But when you realize the number of second-hand cars that are sold and the number of defective



ones turned in, for exchange, there must be a large number of cars on the road that are not really in good condition.

Regarding the 60 year age as to accident insurance, I am one of the unfortunate victims. I carried an accident and health insurance for 35 years and on my sixtieth birthday received a notice that I would have to pay a very heavy premium if I wanted to continue to carry any insurance. In New Jersey the State Medical Society has made a group contract arrangement for health and accident insurance and any member of the society can take out an accident and health policy through the society without regard to his age. So I invite you to come over into Jersey and join our society.

As to claiming the right of way, I think that is one of the most frequent causes of accident. Some people think that after they have blown their horn all the rest of the world should stand idle and let them drive on. Dr. Sommer referred to some of our Jersey roads and I would mention the White Horse Pike. If any of you want to make money you can safely bet that there will be 2 people killed tomorrow (Sunday) down there between Philadelphia and Atlantic City. That is the average Sunday rate for the past 3 years.

I have been collecting information on this matter for the past 5 years. I culled out of it the striking things, and of course, I have only presented one aspect of the picture. I presented it, as I am accustomed to do, rather forcibly because that was the thing I wanted to get before you. What I did ask was that we might adopt a resolution that we should take back to our respective societies, a recommendation that they each do something toward eliminating this large number of accidents. It was one of the objects of this conference in the beginning that we should try to bring about correction of some of these evils, especially legislative matters, and that we should try to have unified action, and I thought this was one of the subjects that we could act on with harmony. Whether we should recommend this physical form of medical examination or the one set forth by the American Medical Association is of no great importance. I think either would have to be modified for each state in order to get it adopted.

*Dr. Sommer:* Before I put this resolution before you I might say that we are much interested in New Jersey in the control of accidents because we are such a big interchange highway between the points East and West. There is a tremendous amount of traffic over our highways and they are being extended more and more all the time. We are getting ready to spend another \$100,000,000 on them, and it is quite important that our highways shall be made as safe as possible. In our county, Mercer, we have had as many as 12 dead brought into 1 hospital in 1 week. Our hospitals on Monday mornings are filled with automobilists broken up into various pieces.

*Motion* previously made by Dr. Donaldson, that the Resolution presented by Dr. Reik be adopted, was seconded and unanimously carried.

#### RESOLUTION ON PHYSICAL EXAMINATION OF AUTOMOBILE DRIVERS

*Whereas*, the number of deaths resulting from automobile accidents in the United States of America has reached the enormous total of 33,000 for the year 1930, and continues to increase annually at the rate of 10%; and

*Whereas*, it seems apparent to physicians that a very considerable proportion of this terrible death

rate is due to the unfitness of many automobile drivers; and

*Whereas*, we believe that every applicant for an automobile driver's license should be required first to show physical and mental fitness to be entrusted with the handling of a machine that carries so many possibilities of dealing out death to innocent citizens; and

*Whereas*, the requirements of such a physical and mental examination as a preliminary to the procurement of a license is within the power of motor vehicle commissioners to institute, without working a hardship upon anybody who has a reasonably good claim to possession of a driver's license;

*Be It Resolved*, that the Tristate Medical Conference recommend to the Medical Societies of New York, Pennsylvania and New Jersey the adoption of a standardized plan for such examinations, and request that each society use its best endeavors to procure in its own state a legal requirement of such examinations precedent to issuance of drivers' licenses.

#### Obligations of Professional Public Medical Service

WILLIAM H. ROSS, M.D.,  
Brentwood, L. I.

While medicine's interpretation of its problems is largely economic, there is a growing appreciation of the value of medical public relations. There are many health influences at work today with the objective of improving public medical service. These organizations need guidance and leadership and it would be better for the profession to furnish them leadership in the interest of both the public and the profession, than to let them go on without guidance.

Reduced to essentials, the real problems of medicine are: first, to increase public availability of medical resources for preventing disease and conserving health; second, provision for adequate medical care for every citizen of the state at a price that he can afford to pay. These are important problems that will press harder and harder for solution.

While the profession of medicine is attending to its private occupation of the practice of medicine and fulfilling the desired relationship of doctor and patient, it should meet its public service obligation and give guidance to the solution of social medical problems that command more and more the support of intelligent public opinion. Medicine could do this better during the formative stage of health activities than after these have become established. For its own protection, medicine should take a more active part in the solution of public medical service problems. It is generally accepted that a primary function of government is protection of the health of its people. Other countries have assumed, in varying degree, this responsibility. It would be better if the profession in America would work out a system to take care of public health problems rather than to wait until other organizations assume the responsibility.

We should remember that medicine has always been a social function. It is only 200 years since it depended upon gratuities. The profession renders its services in time of distress and disaster. Medicine has a very definite relation to the realities of life. In this sense the medical profession sustains a different relationship than any other, but it is not organized for the administration of public medical needs. It requires the help of other organizations and some of them are governmental. Medicine, however, is looked to by the public to

direct and furnish leadership to all of these activities. These things will not be settled by any wisdom of the present, but by a vision of the future. What will be the social conditions confronting medicine if there is a further development of the use of machinery in industry? What would happen if man's wants could be supplied without giving an occupation to everyone?

In studying the problems of medical relationships, the view point of the general practitioner is probably the nearest correct. The general practitioner makes up 80% of members of the profession of medicine, and general practitioners do 80% of the practice of medicine. In working out the problems of medical relationships, it is necessary to understand the view point of the public on one hand, and, on the other, the view point of the practitioner of medicine. There is a responsibility resting on the medical profession to improve public medical relations. It is apparent that the public expects the direction of public health service by doctors and that the public looks to the medical profession to make available the resources of health agencies, official or unofficial, and to give them professional leadership. It is apparent that the public expects the medical profession to determine the soundness of health programs. The profession of medicine should carefully meet public expectation before the public turns to other sources.

Organized medicine, through the Public Relations Committee, in New York State, is undertaking to constructively solve unsolved health and medical problems instead of destructively contending with the efforts of the public assisted by unofficial agencies. The Public Relations Committee is broadening the view point of medicine. It is upholding the work of the general practitioner and making him more interested in the broader practice of medicine. It is undertaking to find the common ground upon which medicine and other organizations can work for the betterment of public health, instead of objecting to programs on the sole ground that, they interfere with the private practice of medicine. The Public Relations Committee of New York State is endeavoring to develop conditions inimical to the oncoming drift of *state medicine*. If socialized medicine ever comes in America, it should not be because of neglect on the part of the profession to meet public medical problems.

#### DISCUSSION

*Dr. Patterson:* I have no very clearly thought out ideas with regard to the very broad subject presented so well by Dr. Ross. I take it that he looks to the future with some apprehension unless the medical profession realizes its responsibilities in a big way. I have this satisfaction in looking toward the future: the medical men who are being trained today in our medical schools are certainly, as a group, the superior of any group that has preceded them. Not that the best of today are any better than the best of a generation ago, but there are many more of them and in those young men as they come into positions of influence in the medical profession, I believe, is the hope of the future of medicine. It is perhaps worth while to remember that the medical standards of these United States of America are today higher than those of any other country in the world, and that the educational standards of medicine are uniformly higher than those for any other profession in this country. To illustrate what I mean let me say that *some* law schools, *some* technical and professional schools, enforce high standards, but *all* medical

schools have today universally high standards which are enforced.

The other reflection that results from Dr. Ross' paper and from other thoughts that I have had with regard to this subject is this: I sometimes wonder if the medical profession has not been hypercritical of itself, whether we do not expect too much of the group of medical men and whether after all medical men do not perform as well or better than other groups and other organizations. I rather think they do, and I rather think that it is a mistake to be hypercritical of ourselves and our own work lest we create in the minds of the public the idea that medicine is not living up to its obligations as well as it should, or the disproportion between what it should do and what it is doing is far more than it should be. I believe that the medical profession is partly responsible for some of the misapprehension existing in the minds of the public today. If such discussions as this could be restricted entirely to medical groups, well and good, but inevitably into the public press and into other organizations have come up discussions with regard to the obligations of the profession. I am rather one of those who think the profession performs reasonably well—to put it in the vernacular, that our batting average is not below the batting average of other groups. Once in a while I think it would perhaps be better to praise than to criticize.

These ideas are not well thought out, I am not well prepared to discuss Dr. Ross' paper and I only make these remarks in order to promote discussion.

*Dr. Vander Veer:* I think the examples that we are all trying to set in our 3 medical societies as represented here argue well for the obligations which we have seen, and I think are foreseeing, in our effort to meet with the public and the lay organizations on common ground of discussion where each has taken his or her part to bring forward a satisfactory solution of public health measures. We cannot do it all in 5 minutes and neither can they, and I think it should be the aim of the medical profession in the next few years to keep alive this desire for mutuality.

*Dr. Morgan:* I have voiced this sentiment many times in years past and am still strongly in accord with the opinion expressed by Dean Patterson, that the medical college is responsible for the making of the physician-to-be, not only in respect to his instruction in the various subjects that appertain to medicine, but also in the larger field of making him a citizen of the state and of the nation, whose mind shall be so started both by precept and example, started during his college years, amplified during his intern years and fully developed by the time that he becomes an active worker in his own profession in the community in which he may settle. Therefore, subjects indirectly related to medicine, such as medical economics, medical jurisprudence, preventive medicine in its altruistic sense independent of the application of medicine to the subject—all of these I think are of vital importance to be stressed upon the teaching profession so that when a man is sent out to practice medicine he will also be a citizen of the state with these 2 assets: he at once steps into the foreground of economic value to his community, and then after he has been trained it is up to him in his sense of proportion as to how far he is going to carry on in his endeavor to practice what he has learned during his college years. Therefore, this resolves itself always into the individual man or woman. The more we can iterate and reiterate



to the student body the need of larger growth, not only as physicians but as citizens, the more I think we will accomplish and the happier we will be for the effort put forth in directing the young student's mind along the direction of his duty as a citizen as well as a physician.

*Dr. Sharpless:* I only want to say this, that I fully appreciate what Dr. Ross has said and I think it is most important. I think that progress in working with the public will depend a good deal upon how willing we are to coöperate with the lay health organizations that have been established all over the country. They are good people, they have an immense amount of public opinion back of them and they have money. We should come into these organizations, as they are the available means of doing these things, and we should direct them along the right lines. The attitude has often been one of hostility, and some things can be corrected, but I think they must be corrected by coöperation.

*Dr. Donaldson:* This subject, to my mind, resolves itself into a division of the medical profession, that is, of those members who are in practice. I believe that men who have been in practice for 20 years or more will have an entirely different attitude on this subject of responsibility to the public from those men who have graduated in the last 5 or 10 years, and who will graduate in the future. Men who graduated 20 or more years ago got through with their education in less time and with considerably less money investment and they knew nothing but service to the public as an avenue of gaining clinical and practical experience, so that their attitude, I believe, is a little more generous than will be the attitude of the man who has had to spend 7 years in study after graduation from high school and whose parents have expended a considerably larger amount of money than was formerly necessary on his education. I do not believe that those young men will be as willing to devote so much time or service to free work, but will expect a quicker return for their money and for the time invested. It is my conception that we older men should furnish the leadership so that these younger men may not be led into a position which will jeopardize the future relation of the practice of medicine and public health, largely on a basis of quick return in cash for services rendered.

I agree that we must relate ourselves as quickly and as closely as possible to all organizations that are interested in any way, shape or form in the practice of preventive medicine; so, we at once are confronted with skilled, trained minds, socialists, psychologists, etc., who, unfortunately, have not our angle of the practical side of even the practice of preventive medicine.

I might briefly relate what we are attempting to do in my own county medical society. We have an organization which we call our Welfare Fund and have just completed a collection of \$1,600,000 to help about 40 different organizations which largely touch upon health. Our county medical society, believing that it is the best equipped to give advice from the health point of view, is approaching this welfare organization with a rather unique proposition. We have made an estimate that it would cost about \$10,000 for our county medical society to make the survey which we believe should be made in order that we might give the best possible advice on relating health service to these 40 different organizations. Inasmuch as a great deal of the health work is now being done by our members without charge, and inasmuch as

our 1300 members probably contribute considerable cash to this million and a half dollars; we are going to work on the nicest terms possible in coöperating with this welfare organization to the extent of financing this survey which we hope will result in better application of the medical and health work to the problems that must be met. I do not know how it will be received but, nevertheless, that is the angle from which we are going to approach this problem. We want to make a survey as to how the money that they are giving over now to most of these organizations is being expended. They claim that 20% of this money is being expended each year in health work. We have reason to believe, from our analysis of several organizations, that the money is not being *carefully* expended, but we want to approach it not from our angle but we want to employ a sociologist to make this analysis so that we may talk to them in their own terms. We want to ask the sociologists to make the survey but we want to be in control of it.

*Dr. William H. Ross (Closing):* I think Dr. Patterson made a very valuable contribution to the problem in reference to the education of the young men, but the young man of today has about the same mental capacity that the young man of my day had and he has to acquire about 3 times as much in the same length of time and, therefore, it is a process of selection.

I did not intend to give the impression that we were criticizing the medical profession, but merely wanted to stimulate them to see what is ahead. All the discussion was very much to the point but I want to emphasize that I did not intend it to be critical of the medical profession, nor did I intend to convey the impression that the medical profession should continue its long standing habit of free work. If this could have been thought over a little more I would have very definitely included the remark that a part of the whole scheme is that the doctor shall be paid for all the work that he does in private practice or hospital service. Perhaps it will carry with it the fact that he will lose some of his vested rights to become a millionaire. I did not use any examples to show what the public is thinking. New York State carried at a recent election a \$50,000,000 bond issue for its service to the unfortunates, and it was carried by a 6 to 1 vote. Steuben County, a small county of New York State, where the medical profession up to 2 years ago did not have a high conception of its public medical service obligations, has since that time established a public health committee and various organizations in which the profession simply guides them and this year a referendum, even in these times of financial depression, was carried so that \$160,000 was voted for health committee service at public expense. In Tioga County they have just opened the Tioga County General Hospital and 3200 of 26,000 people living in that county contributed the money to build it. I had the opportunity of talking to the medical profession and their visitors on the day of the opening and 1600 people came to visit the hospital. That is a very striking illustration of public interest and an indication of the public viewpoint. A very interesting point right there is that the event advertised the fact that in that county they have a Public Health Committee, the Tioga County Medical Society, the Tioga County General Hospital, the State Charities Aid Association, and the State Department of Health, all coöperating in a program to advance preventive medicine and to increase the conservation of life.

In the county adjoining mine, with a population of 80,000 people, the county medical society car-

ried a proposition at the recent election with an appropriation of \$2,000,000 for the establishment of a County General Hospital. Now, these are the straws that indicate that the medical profession is awakening. Here and there you see striking examples of it and when the medical profession does recognize the public viewpoint and does cooperate we will have passed the stage of any criticism of medicine. Practitioners of medicine should be paid for their services, there should be no free work, and there should be organization for increasing the availability of medical resources, the resources that we have told the public about and have not done very much to make available. When they are available, when the principle is established that medicine shall be paid for its services, it will solve many of its economic troubles.

The meeting adjourned for luncheon, where general discussion was continued.

*Dr. Reik:* The next subject on the program, "Should Licensing of Nurses be Brought Under Control of State Boards of Medical Examiners?", was suggested by Dr. Patterson. I asked him to present such a paper and he very modestly replied that he was suggesting the subject because he knew nothing about it. Dr. Van Etten was asked to prepare a paper but he has been ill and could not come. Dr. Kelley consented to give a talk but was prevented from being present, so I think we may ask Dr. Patterson if he would like now to informally open up the question?

But, before proceeding in that direction, may I answer a question that was asked regarding our experience in New Jersey with group insurance policies. Several years ago an agreement was entered into with the U. S. Fidelity & Guaranty Co., in Baltimore, for a group policy protecting our members against malpractice suits, which provided also an indemnity fund in the event of judgment against a member of the society. A very considerable percentage of our members has taken out that policy. It is offered at an unusually low price with the view, of course, of getting a large percentage of the members. In Warren County, for instance, every member of the society has taken out a policy. In the other counties there has been a variable percentage, from 20 to 75. We have 2680 members and about one-half of them carry that indemnity insurance. Three years ago we made an effort to get health and accident insurance, and full life insurance by group policies. We had made a tentative arrangement but found that the life insurance feature could not be carried through because there are certain restrictions in the laws of our respective states that make it very difficult, but it is possible to carry a group accident and health policy. That was taken out with a Philadelphia Company, has been in effect for 2 years and has proved very satisfactory. They issue the policy to members of the State Medical Society *regardless of age*. The price is low, slightly higher perhaps than would apply to an individual policy for the youngest of our members but not higher than would apply to the average age of members; for older members, it is very much cheaper than anything they could get, if some members could get any at all. Age makes no difference in the group, and the company cannot cancel an individual policy; it can only be done by canceling the entire agreement with the society.

Dr. Morrison was last winter put into a rather awkward position, in having to explain why our state society dues had been increased to \$15. There was not the amount of objection that had been

anticipated but some few wanted to know what was being done with the money, so we have just completed the preparation of a pamphlet, which is about the size of the little blue book put out for the Woman's Auxiliary last year, and the title is: "Membership in the Medical Society of New Jersey. Is it Worth What It Costs?" Dr. Morrison has set forth in this book all the *direct* benefits, such as the journal; then the *indirect* benefits that come through association with public health work, such as the antidiphtheria campaign, where we calculate that in the last 2 years a million or more dollars were put into the pockets of the physicians of this state; then the *privileged* benefits, such as taking out the various types of insurance. Incidentally, we have an automobile group insurance policy which gives a rate about the same as the general outside rate, with a 15% reduction and also a 15% dividend at the end of the year, which makes quite a marked total reduction. We are also appending to Dr. Morrison's report, as to whether it is worth while to belong to the state society, these specific types of group insurance, the cost for a policy of each size, and conditions under which the benefits are dispensed. We will send a copy of that book to every member of the state society, then to the county societies in bulk to help in the collection of dues from the backward members, and to be used in bringing new members in a membership campaign.

*Dr. Sommer:* Does that health insurance policy allow 6 weeks extra if the man is convalescing?

*Dr. Reik:* That policy now has a clause in it which is not in any other policies available that I know of. It provides for \$50 a week for 26 weeks in case of accident if you are *house-confined* and it also covers a convalescent period when you *are not confined* to the house. It is the most liberal policy that I have seen and that clause has been granted to us after 3 years of experience by the company with our state society.

#### LICENSING OF NURSES

*Dr. Patterson:* Of course, this subject has all the elements of a row and it may result in that. I always feel a certain sort of diffidence in dealing with any problem concerning women because I never had any influence with them individually or collectively. However, I have a certain sympathy for them and their difficulties and from the little I know about this question of licensure of nurses and of Nurses' Boards it seems to me to lie between 2 extremes. On the one hand we have certain hospitals of restricted types of practice, in which maintaining a nurses' training school so-called, is what I would call a particularly mean and cheap way of getting a lot of work done; hospitals in which there should be graduate nurses paid for the services which they render, and when hospitals of that type pretend to maintain a training school for nurses it is both a cheat upon the young woman herself who enters that school and it is a cheat upon the public. There is not the slightest doubt about it. On the other hand is the desire of the organized nurses' societies to elevate nursing to a high standard and to establish it as a profession with self-regulation. In Duke University, for instance, which I recently visited in North Carolina, the nurses' training school of the hospital is put on the basis of a college course. Nurses admitted to the training school have enforced against them the same requirements for admission as against other students admitted to other college courses and they have exactly the status of college women, as well as the privileges of



dormitories and libraries, but instead of studying for a science or artist's degree, they are studying for a nursing degree. Now, perhaps that is the idea to which the nursing profession is tending. In the Commonwealth of Pennsylvania we have 30,000 nurses who are all licensed; a very important group, of course. We have a nurses' registration board which at one time was subsidiary to the Medical Licensing Board but some years ago was detached and is now independent of any medical control. The complaint is made that this Board has become extremely arbitrary, that it has gone to various hospitals and has served notice upon them that this or that thing is not to their liking, that they do not approve of the dormitories or reading rooms or bath rooms or some other provision made for the nurses, and they do not approve of more than 1 nurse sleeping in a room, etc. They have even asked to see the plans of hospitals before they were built and in some instances have served notice that those plans were not satisfactory and if built according to those plans the hospital would be stricken from their list, which would mean that the hospital would not be able to maintain a training school. Now this Board is pursuing exactly the same arbitrary methods that were pursued by medical examining Boards 20 or 25 years ago, when they served notice on medical schools that unless they did so and so they would be taken from the approved list. The nursing boards are not doing anything that our own boards have not done.

I suggested this topic for discussion because I have been unable to know just how this matter ought to be controlled. I am certainly sympathetic with the desire of the nursing profession to maintain satisfactory standards, and I do believe that there are certain so-called training schools that do not deserve the name and that should be closed up, and the work which is done by so-called pupil nurses should be done by paid graduate nurses. I think when a training school is maintained because it is 90% of advantage to the hospital and 10% to the young woman there is something wrong about it. On the other hand, it does seem to me that there should be some regulation, some control of Nurses' Registration Boards. They should be in some way related to the medical profession. If the nurse is the doctor's helper, she should be willing to occasionally take counsel and advice from those whom she professes to help and from whom she receives her instructions. Now, how should these nurses' examining boards and registration boards be organized? Should they be independent of control or under medical regulation? How sympathetic should the medical profession be to the aspirations of the nurse to as rapidly as possible effect an elevation of standards, to perhaps go through something of the same evolution that medical education has gone through in the past 25 years? I am sorry that there are not some nurses here, for perhaps I could arouse them to such fury that they would discuss the question fully. I should like to know from the doctors around this table, who know more about this subject than I do, what their opinions are.

*Dr. Ross:* Dr. Patterson has exactly pictured the situation in New York as I know it. It sounded to me as if he might be a resident of New York, as he was talking of this situation. I am in such complete sympathy with what he has said that I really have nothing to add. He has pictured a very true condition. I can add just one little supporting illustration. In 1 hospital that I know of the Examining Board of Nurses

said that it would not approve of the graduation of its nurses because some undergraduates were employed. When asked if they had not the right to do that, they said "yes", but the facilities for caring for the nurses were not perfect, as the graduate and undergraduates had to use the same lavatory. That was the sole objection to the educational facilities in that institution.

*Dr. Sharpless:* I believe that Dr. Patterson has had some experience in a small hospital. I have been connected with a hospital of 125 beds in a town of 14,000 people and we are constantly being corrected and advised by the Bureau of Nursing Education and about certain matters that we think are unnecessary. For instance, they require that certain examinations of patients be made that are of no advantage to the patient whatever, but simply in order that the nurses may have experience in that particular kind of work. They have also told us that we must have an assistant to our Superintendent. We think she does not need an assistant, she has 8 or 10 supervisors, each in charge of a department, but they say that is 1 of their regulations—that the Superintendent must have an assistant—and they will impose upon us the expense of \$1200 or \$1500 a year which we can very poorly afford in order to carry out their theory and to supply a person whom we think we do not need. Otherwise, they will take us off the approved list. Now, it may be that our hospital is one of those that should not have a training school, but our nurses all take the State Board examination and pass it and we think that our nurses are well trained.

Furthermore, I think that we do not now educate and give to the public as good nurses as we did 15 years ago when educational standards were not so high. I think they have made nursing mechanical and do not now teach them the development of personality, the value that there is in the personal touch and the personal understanding and sympathy for patients, which the nurses had some years ago. I may be mistaken about that but I judge largely from my own observation and I believe that the nurses that are now trained in Pennsylvania are not as well trained as formerly in care of the sick. They get a better education, learn a lot about bacteriology and psychiatry which are made little use of, but they do not learn as much about how to take care of the sick person as nurses did years ago.

*Dr. Morgan:* I may speak specifically about Pennsylvania, probably reflecting a similar condition existing in other states. I think the nursing situation has gotten out of bounds in respect to having nurses in hospitals to be assistants to the physicians, to act under orders and directions with the primary object on the part of both the benefit to be derived by coöperation between physicians and nurses in the welfare and care of the patient. From observation I am fully of the opinion and I have heard expressed on many occasions in the past couple of years, that the present day product of a nursing school shows that the young woman sent out supposed to be a fully trained nurse, has knowledge of a test tube in inverse proportion to her knowledge of the use of the bed-pan.

*Dr. Vander Veer:* In New York State, as you know, all the educational schools are under the Board of Regents. Subservient to the Regents is the examination and licensing of nurses. Now we are going through the throes of a period where we have pressure brought to bear by the nursing group to elevate their profession. They lay down

the law to certain hospitals. They have, however, elevated the profession to a very marked degree until they are now becoming rather overbearing. At the same time they have brought this to pass with a number of small hospitals which do not come up to the standard: Many of these hospitals that are lacking in obstetrics, for instance, have their nurses take courses in obstetrics at other institutions. We have in Albany 1 hospital that does not have the required amount of obstetrics and pediatrics and those nurses go to New York to take such courses before getting their certificates. We have a number of smaller hospitals in New York State that have to meet the same problems. Some of them send their nurses to Syracuse and to other cities for this complete curricular work. However, we are getting to where some of the nurses tell us what to do, and we do not like that. On the other hand, we are getting some nurses that do not know enough to do nursing and we really do not know just what is the proper move to make. A nurse who is graduated in New York State cannot practice nursing, except under the domestic or certified nurse rule, which is a rather questionable ruling, unless she has passed the State Board and received the degree of R. N. from the Board, and not from the school from which she has graduated. Those interested can write to the Secretary of the Board of Regents and get the gist of the law, and also to the State Board of Examiners for Nurses. I think you will find they have solved part of the problems but not all.

*Dr. Lawrence:* I have been working with Dr. Van Etten and Dr. Harris for several years investigating the nursing situation in New York State. Things have quieted down somewhat but I do not know what effect our work has had. We have gotten as far as Dr. Patterson hints his state might go. Our nurses' training schools have dormitories with names such as Winchester Hall; they are real college institutions and we recently raised the requirements to a full high school course. The medical society approved of that and immediately the Board of Regents raised the requirement to a 4 year high school course. We have a number of nurses in the Nurses' Association who are eager to see the training equal to that of any other college course and they are also very desirous of having all nursing done in the institutions or private home limited to these registered nurses. That has been pointed out a number of times to work a great hardship on the sick but that argument does not seem to carry the same weight to the general person interested as it does to some of our physicians. Now our hospitals have had exactly the same experience with regard to the type of building the nurses shall occupy and the facilities that shall be given to them for training. One nurse at a meeting of the Nurses' Association stated that she felt the hospital was the laboratory of the nurses training school and should so be considered.

I am not so sure that adding physicians to the Examining Board will give you a remedy for the conditions because we have physicians on our Examining Board and they have written the most elaborate curricular in a book 6x8 inches of ordinary sized print. The physician who outlined the course in surgery occupied 11 pages which must be taught to these nurses. It is the most outlandish affair that was ever prepared and handed out, the idea that a nurse should undertake the work outlined in that book, with the number of hours required, and the type of questions asked.

I would be glad to send some sets of questions that have been asked by the Regents. If you or I could pass those examinations we would be very well content that we still knew some of our medicine and when those girls pass that examination they are entitled to feel that they have a right to dispute with the doctors, and do not hesitate to do it.

I believe one approach to this matter is through the hospitals themselves. There are hospital superintendents who are exceedingly ambitious to have large training schools. Some of those are among the most influential men in the state. They are proud of the training schools and are determined to have them all raise the qualifications, and the public is paying the bill through the charges made for hospital patients. I do not believe that you will get a complete remedy by putting physicians on the Board but I think the main approach is through the hospitals. Some of them insist on training the nurses in their own way and are getting away with it.

*Dr. Hammond:* My feeling is that if it could be accomplished it would be to the best interests of the profession. If the nursing profession takes the attitude, and it is given widespread publicity, that the profession knows little or nothing about the nurses' training school, it will be thought that the physicians should not have full control. I have heard of 1 hospital where the personnel consisted of 3 persons, 2 graduate nurses and 1 physician. The physician told me that it was a farce to have meetings because he was always voted down.

In Pennsylvania our Examining Board consists of 3 nurses. There is no longer a physician on the Board. The nurses have given publicity to the idea that physicians should keep hands off so far as administration is concerned. On the other hand, I think it is to the best interests of medicine if the Board of Registration of Nurses could be eliminated and the matter brought under the control of the State Board of Medical Examiners. I recall that in Chicago a couple of years ago, discussing this question with a Professor of Neurology, he said that as a matter of trying out the questions given in the State Board of Registration of Nurses he gave those questions on neurology to the third year medical students in their final examinations and some of them fell down badly. That is true among many other departments of the academic work of the Nurses' Training Schools. I think it would be a big thing if this question could be controlled by the Board of Medical Examiners, but there would be tremendous opposition to such a proposition on the part of nurses.

*Dr. Sommer:* We, of course, have a State Board of Nurses and I can see from this discussion that we have lost sight of one very important individual in this nursing problem, and that is the patient. If the patient did not exist the hospital would not exist, and there would be no call for either nurse or doctor, and it seems that in the regulations that these Boards send out every year for guidance of the profession and the care of nurses they have lost sight of the real interests of the patient. Last year the Board of Nurses passed our hospital all right but suggested that we have a Board of Managers for our training school, consisting of a lawyer, the head of the training school and a lay person, intimating that the physicians, a committee of 3 from the staff who had charge of the training school, did not know how to run a training school. A rather startling sort of message to send to the head of a



hospital, that the physicians themselves were not fit to be managers of a training school. That savored of what you might call trade unionism. Furthermore, the individual that we looked upon as a handmaiden and a worthwhile adjunct to the care of the sick is now trying to be our master and to teach us how to practice medicine.

Lately there has been another endeavor, that is to institute in our hospitals a department for mental diseases. We all know that these girls who are being trained to be nurses are not at an age where they would be competent to take care of mental cases, nor is it right to house mental cases with other patients, even though you have a separate building, and to put them under the care of the ordinary undergraduate nurse. I have had many years' experience with the State Hospital in Trenton in various capacities and I know the type of nurse there is much older than those who apply for our training. I cannot see where an exchange of nurses between a mental institution and a general institution would have any advantage. Rather should it be that the nurses who want that sort of training should get it as a post-graduate training than as undergraduates.

Then comes the question of an individual room for every nurse. Certainly these things are very idealistic and very nice. I take it that the average girl would prefer to have a companion, however. The outcome of all this is that it raises the cost of medical care and therein lies a factor that the nurses' training boards do not take into consideration. In municipal institutions it raises the tax rate. We say that we should not care about that, nevertheless everybody does care whether the tax rate is higher. Certainly the tax on the individual patient is higher each year. The patient is very frankly told that she must have 2 special nurses. That was not true in days gone by; patients were contented with 1 nurse even though she did not give all of her time to that patient. Therein lies another of the objections to the regulations of our various nursing boards, as I see it from the standpoint of one connected with a general hospital for 30 years.

I am in accord with the idea that this is really a hospital problem but medical men should at least have some sort of a representation and preferably an equal one upon these boards. I think the nurses, left to themselves, have gotten far away from Florence Nightingale's original idea of nursing service to the patient.

*Dr. Reik:* If it meets with your approval I will ask the New York representative to put this topic on the program for the midwinter meeting with a formal paper, particularly if we can get Dr. Van Etten to give it, and a fixed discussion. The subject has been before the conference before, some 3 years ago, at the time when Dr. Van Etten had just been appointed by the A. M. A. to study this question.

While we are discussing the examination of nurses, I am reminded that the Medical Society of New Jersey is somewhat perturbed at this very moment by the fact that a special session of the legislature is considering passage of a law that would combine all of the state examining and licensing Boards into a new bureau to be established in the Department of Public Education. This comes about as a by-product in an attempt to reform methods of handling public funds. There has been much complaint about extravagance and waste of state money, and after investigation by a special commission, recommendations have been made for revision of the present methods of budget

preparation and legislative appropriation. Fundamental measures, among a series of bills designed to put the commission's recommendations into force, provide that all money received by licensing Boards, as well as by all officers, committees, and other Boards transacting state business, shall be paid into the general treasury, and that each Board shall annually request an appropriation for conduct of its business. The State Board of Medical Examiners has been accustomed to retain all funds received from examination and licensing fees, and from fines collected from illegal practitioners, and to use the excess over office expenditures for enforcement of the Medical Practice Act. As good citizens, members of the medical profession approve the principle involved in the provisions for treasury control of all moneys and expenditure only by budgeting and proper appropriation, but our members and the Board of Examiners fear that if these funds are surrendered to the general treasury it will be difficult to secure appropriations sufficiently large to carry on the Board's work as well as it has been done. So, at the present moment, we are much concerned over the possibility of the legislature enacting this law.

*Dr. Sharpless:* I do not think it is any hardship to ask these nurses to come in and work for 3 years at a small salary. They leave at the end of 3 years to enter the best paid profession open to women. I think they are fortunate in being given an opportunity to get such training. I have visited many of the training schools and Dr. Patterson has done the same thing but we seem to have come to rather different conclusions about having training schools in many of the hospitals.

Dr. Patterson and his co-workers are about to introduce a new medical practice act in Pennsylvania and I would like to see that act put the control of nursing under those who are charged with its enforcement. It is not a proper thing for the nurses to do this unaided and unadvised and it would be a good thing to put the whole affair under one head, a commission that will include all sorts of regulations enacted for the practice of medicine.

*Dr. Patterson:* Dr. Sharpless and I do not disagree at all. We are generally in agreement. I agree with what he has said and I am sure that he will agree with me in what I am about to say. I think, in the first place, that any hospital that establishes or maintains a training school for nurses assumes a certain obligation to provide that pupil nurse with certain things. First, she should get an adequate experience in the various branches of medicine; secondly, the school owes an obligation to her to see that she has adequate facilities for receiving certain instruction, other than purely bedside nursing, and of course she should be properly housed and fed. The staff should be adequate to carry on a course of instruction.

I do not think that all hospitals should have the same standards but Dr. Sharpless will agree with me, I am sure, that there must be some minimum educational standard to be applied to those admitted to such training. And I do not think that the hospital should be altogether selfish about it. It is one of those undertakings which carries with it an obligation to do certain things that may not be profitable. Medical education is the most unprofitable thing to be engaged in. The tuition fee probably pays about one-half the cost of instruction. I think the same thing should apply to nurses, that the hospital should regard its training of nurses as one of its contributions to public welfare.

Unless you do have some sort of minimum stand-

ard established by some authority the result is that hospitals will bid one against another for young women to go into their training schools. That was true once of medicine. The lowest grade schools would admit students with the least possible requirements for studying medicine. I do not mean to refer to the smaller hospitals, such as the admirable one which Dr. Sharpless heads, but he knows and I know that there are some hospitals that really do not provide adequate experience, adequate laboratories or diet kitchens and demonstration rooms adequate to give nurses even elementary instruction in some of the things they should know, and those training schools should be dropped. I do not believe there are very many such hospitals, however. I do agree also with Dr. Sharpless that some of the requirements are unreasonable. I know our medical students live in their dormitories and fraternity houses, sometimes 4 in a room with doubledeck beds. Under the regulations of the nursing board the nurse is far better provided for than is the average student of medicine. Sometimes 2 bathrooms will suffice for 25 or 30 men and they get along somehow and turn out to be reasonably good doctors. I think that somewhere between the extremes of what those will have in mind who want to elevate the standards of the nursing profession, and way down at the bottom with the hospital that does not offer adequate training, there is some middle ground where the standard should be fixed and maintained and enforced, I have a notion that nurses' examining boards, medical and dental examining boards should be under some control outside of themselves. I believe that would be a good thing for all of us.

Dr. Reik may be interested to know that in Pennsylvania we have exactly the system that he now fears having imposed by the Legislature. We have a budget system and a secretary of the budget to whom the applications from various departments must be made for all appropriations. All fees received are paid into the public treasury and all budgets are handled by the secretary. It has not worked out badly and could perhaps work out very well. The problem then becomes one of getting an item into the budget adequate to the purpose for which it is intended. Our medical board works under exactly that system.

*Dr. Reik:* Do you get money from them for prosecution of illegal practitioners?

*Dr. Patterson:* Yes. There is an assistant attorney general to do the prosecuting. The Board has 2 investigators who go around and collect evidence. The state will also cooperate in that endeavor. However, our budget item is not fully satisfactory and we want to change that under the new law. In Pennsylvania we have no Board of Regents but our proposal is to set up an administrative board of governors for the healing arts. In a sense it will be a Board of Regents restricted to the medical arts and under that administrative board the examining boards will be appointed to conduct special examinations and to report the results of those examinations and the Board of Governors will issue the license instead of the Examining Board. That will make a better group of examiners who will not be responsible for deciding questions of standards. On that administrative board there will be educators and some representative of the public, and certain ex-officio members of various departments. I have a feeling that our position in medicine would be stronger if we could give over a certain part of our authority

at present vested in the examining boards. If we do that it means allaying the criticism by many that the doctors control the thing in their own interests, and I have no fear of the results.

My experience in Pennsylvania, on the Commission of the Healing Arts, was rather revealing. There was a board of 12 and on that board was a Bishop and a Judge, and they were the 2 best supporters I had for the establishment and maintenance of satisfactory standards of technical education. You do not need to fear men like that and they are a good sort to get behind and let them make our fight for us. If they will take the lead it will relieve us of a criticism that we are controlling things for our own interests.

You might be interested in hearing a little more about the budget system in Pennsylvania, but if it works as well with you as it has with us you need not fear it for you have enough influence to get written into the budget items for sufficient appropriation to carry on certain work without regard to whether the fees are more or less. When the appropriation is less than the fees we make an awful howl but at other times do not say anything.

*Dr. Reik:* You have a special registration tax, I believe?

*Dr. Patterson:* Yes, \$1 a year. That bears no relation to the sum set aside. It is a very valuable aid to law enforcement. The fee paid should be just adequate to the cost of conducting registration, maintaining a register, publishing it and supplying to each registrant a copy of the list registered. That immediately calls attention to any illegal practitioner. In Kansas they recently put a man off the State Board who had never been licensed to practice medicine but who had been serving on the State Board of Examiners for several years. Annual registration and publication of the list will reveal many men in certain communities who are not registered at all. It is a good thing to conduct it annually, and \$1 a year will cover the cost and this is a very small fee. In North Carolina they charge what they call an occupational tax and every doctor pays \$25 a year, so we should not complain about a nominal fee that just about covers the registration itself.

*Dr. Sharpless:* I agree with everything that Dr. Patterson has said and I am very glad that he is President while our Bill is going to the legislature. I think it is the duty of everyone to support him heartily. Every difference of detail should be thrashed out before the bill is presented and then we should all get behind it.

*Dr. Patterson:* I am much indebted to those who took part in the discussion and am sure it was very helpful.

*Dr. Donaldson:* I wonder if it would be well at the next meeting to go so far as to have some one present the nurses' side of the question?

*Dr. Reik:* We have at times invited outsiders to take part in the discussion.

*Dr. Donaldson:* I think it would be interesting to have some proponent of the nurses' point of view speak to us.

*Dr. Sommer:* I think it might be well to have



some one from the Board of Nurses' Examiners of each state. I believe also that we should have a representative from the New York Board of Regents.

**Dr. Reik:** Regarding the pending legislation in New Jersey, what we fear is not that there is anything wrong with this theory but we fear its possible political working. If we could name the Commissioner of Education we would be satisfied, but that office has at times been a football of politics. The present incumbent, Dr. Elliott, we would be quite willing to trust to direct the whole affair, but we do not know who his successors will be. I think we could always bring enough influence to bear to get what money we needed to be appropriated, and possibly get more money by that means for prosecution than we have ever been able to get by any separate and distinct bill. There has been opposition in New Jersey to an annual registration bill. Our Welfare Committee drafted such a bill, voted by a majority of 5 to 1 to advocate its passage, but 1 county society objected so strongly that we withdrew the bill because we did not want to go before the legislature with divided forces. They objected to the same thing that you have discussed in Pennsylvania—the medical profession would be taxed for a fund to enforce the laws. But unless we provided the money in some way we knew the law would not be enforced. We have had a special deputy from the Attorney General's office to conduct all of the trials, who has been very sympathetic and energetic, and our Board has combed the state pretty thoroughly during the past 4 years searching out illegal practitioners; but if we surrender control of that fund to the general treasury it is felt that we will find it hard to get it back again for enforcement purposes. It may be an unreasonable fear.

**Dr. Patterson:** It is well said that the doctors should not be called upon to enforce any law provision by a pecuniary contribution, but if you restrict the fee paid merely to covering cost of registration itself it would be a very valuable thing.

**Dr. Ross:** New York has a \$2 tax and the Board of Regents is very well pleased with the results. They have utilized that fund for pretty much all transactions.

**Dr. Donaldson:** I would like to voice the sentiment of the Pennsylvanians present in our appreciation not only for having provided us with a good program and a good luncheon, but also for having these ladies to grace the table today.

**Dr. Sommer:** We are indeed glad to have the men from Pennsylvania and New York here today and as we have become better acquainted it makes the gathering much more happy.

**Dr. Lawrence:** I would like to invite the Tristate Conference to New York for its next midwinter meeting. It is customary to come over there for the winter meeting but we do not want you to feel that you are not invited to come.

Motion was made by Dr. Reik that the invitation be accepted, which was duly seconded and carried.  
Adjournment at 3 p. m.

## In Lighter Vein

### Breakfast Nook Repartee

"Anybody would think I was nothing but the charwoman!"

"Especially if they saw this toast!"—Life.

### Service Plus

Billfuss—"I wonder if that fat old girl over there is really trying to flirt with me?"

Goodman—"I can easily find out by asking her; she is my wife."—Pathfinder.

### Broadminded

"Did I leave an umbrella here, yesterday?"

"What kind of an umbrella?"

"Oh, any kind. I'm not fussy."—Boston Transcript.

### It's a Topsy-Turvy World

"Times certainly have changed," sighed Smith.

"How so?" asked Robinson.

"Why, at a little family party last night, the women talked politics while the men got off in a corner and exchanged recipes."—New York Times.

### Hymn of Hate

Two Negroes who had been engaged to mow the lawn of a big hotel were quarreling.

"Niggah," said one, "does ycw know whut I done wish? I done wish dat hotel yonder had a thousan' rooms in it, and that yew wuz laid out daid in e'vy room!"—Tit-Bits.

### Making of a Home Body

Mr. Yearwed—"A bunch of pretty college girls have opened a mending shop near my office. I think I'll turn all my socks over to them."

His Wife—"Poor boy. I have neglected your socks. But leave them with me. I like to darn. I really do."—Boston Globe.

### Wuss, Wusser, Wussest

Sambo, a Southern darkey, married Liza. In about two weeks he came to the reverend gentleman who had tied the knot, looking as if he had lost his last friend in the world.

"What's the matter, Sambo, aren't you happy?" the preacher inquired.

"No, suh, pahson. Ah wants a divorce."

"I'm sorry to hear that, Sambo, but you must remember that you took Liza for better or worse."

"Ah knows dat, pahson, but she's wuss dan ah took her fo'."—News Bureau, quoted by the Christian Leader.

### Diplomacy

"Did you make the debating team?"

"N-n-no. They s-s-said I w-w-was'n't t-t-tall enough."—Jack o' Lantern.

### Domestic Yes-Man

"The man who gives in when he knows he is right is weak," says a novelist.

Or, of course, married!—Border Cities Star.

## Public Relations

### STATE MEDICINE AND CONTROL OF SPECIALISM

(Abstracted from the Presidential Address of Dr. John A. Hartwell, delivered at the Academy of Medicine, New York, January 7, 1931. These particular sections of President Hartwell's address, dealing with problems and conditions so similar to those facing us in New Jersey, are worthy of careful consideration. Furthermore, the recommendations and means for making action effective seem just as applicable to the Medical Society of New Jersey as to the Academy of Medicine of New York, if we cannot devise better plans. Other portions of the address discuss other subjects of importance and great interest to the profession, but we choose these topics for a distinct focusing of attention.—Ed.)

Every undertaking must have a leader. The Academy can and should be the leader in the betterment of medical practice in every way that offers itself. Much fear is at present expressed that doctors are losing control of their own destiny; that lay bodies and the state are tending to become our dictators and that our freedom of action is being taken from us. If there be any ground for such fear, this Academy is so situated that it can accept the challenge and demonstrate the ability of the medical profession to shape its own course on a road of sound endeavor.

The practice of medicine has not escaped the disturbing influences which are appearing at this time, in all human activities. A reading of books, magazines and the daily press only too surely demonstrates that almost everything of the accepted order is under attack. There is abroad a spirit of skepticism and unrest. Knowledge of biologic processes has advanced and is advancing more rapidly than it can be assimilated and applied to the complex matter of maintaining good health and restoring it when lost. The laity is impatient at this.

Every physician is driven into limiting his activities to a comparatively small field. Even then he constantly finds himself faced with problems of public and individual ill health which tax his resources and to which he finds great difficulty in applying accepted facts which the scientific investigators have established. To meet this situation he constantly is confronted with the necessity of calling to his aid other doctors. Thus the specialist was called into existence and, once created, the growth of specialism has been rapid and largely uncontrolled. It is now necessary to review this situation and place the practice of the various specialties in the hands of men who are competently and completely trained.

Critics of the medical profession call attention to the fact that there exist in organized medicine no means by which the patient is able to be well guided in the selection of his physician. Reasons for this are partly the responsibility of the doctors and partly of the patients. It is true that as at present organized, the state licenses a practitioner of medicine and thereafter exerts no control over him whatever, unless he be guilty of a felony. He is at complete liberty to undertake the care of any type of patient and to institute any therapeutic measure that he deems advisable. If the public, therefore, is to be served in the best way, it is necessary that it should have information that will permit the se-

lection of a physician who is fully fitted to meet its requirements. The furnishing of this information would seem to be a function of the profession itself.

Many publications, both by members of the medical profession and the laity, appear at the present time more or less strongly urging the necessity of state and federal control of the practice of medicine. A careful study of much of this fails to impress one with the belief that the argument is carefully thought out. There can be no gainsaying the fact that, in the last analysis, the health of the community and of the individual is a matter of public concern in which every individual, whether well or ill, has an active and definite interest. It cannot be denied that illness, as such, is a charge upon the entire community, directly or indirectly; that enormous sums of money are expended in an effort to maintain good health; and that, under ideal conditions, this amount could be greatly reduced. The state already has a very active part in this work; and we believe, many statements to the contrary notwithstanding, that the medical profession as a whole, is solidly behind the state and federal government in every effort to diminish individual or public ill health.

The accusation is made that the individual doctor is little concerned with this endeavor; and the more cruel accusation is made that his unconcern is stimulated into active opposition because of the fear of financial loss.

It is true that many doctors, because of the lack of proper emphasis in the medical college curriculum, have not developed a broad view of the possibilities of preventive medicine and the public health as entities. To say, however, that they are not interested in these things and that they place themselves in opposition to real progress because of an ulterior motive, is, I believe, far from the truth. If organized medicine oppose itself, at the present time, to governmental control of the practice of medicine, it does so only because it is not convinced that either individual or public health would be thereby conserved.

The British Medical Association states that it has been giving serious consideration to this problem for 30 years. It has evolved a plan, for use in Great Britain, which was published as a supplement to the British Medical Journal of April 26, 1930. The hub upon which this entire plan centers is the increased importance of the family doctor. Whether the patient be entirely independent and financially able to bear the full responsibility and cost of illness, or whether he be at the other end of the social scale, the relation between the doctor and patient shall be personal and individual without the intervention of any third party. The report states that: "the medical service of the community must be based on the provision for every individual of a general practitioner or family doctor." \* \* \* Insofar however, as the individual doctor can promote the prevention of disease, this can best be secured by associating every general practitioner with the general health service and emphasizing on every possible occasion the fact that there is no real line of demarcation between the preventive and curative branches of professional work; and, that a satisfactory system of medical service must be directed to the prevention of disease no less than to the relief of individual sufferers.

I believe that organized medicine in this country will be found entirely in accord with these



statements and that it will fully coöperate with governmental agencies in putting them into effect. The problem, however, is too complex to permit of a sudden transition from long established custom to a revolutionary change that would be in need of constant revision.

The Committee on Education has taken the lead in studying the problem of specialism and the education and qualification of specialists. A subcommittee under the chairmanship of Dr. Eggers has been engaged in the work for nearly 2 years and in association with the Committee on Sections, the Committee on Admissions and interested Fellows, a concrete plan was presented to and adopted by the Council at its meeting on December 17. The Council will later submit proposed changes to the By-Laws which, if adopted by the Fellowship, will make the plan operative.

The proposals have 2 definite aims. First, to stimulate the activities of members by a form of promotion, and second, to lay down qualifications in the various specialties which will have the approval of the Academy. Conformation to these will qualify a Fellow in the given specialty, and the Academy thereby becomes his sponsor as competent in training and experience to practice such specialty. Ultimately a way may be found whereby doctors, not Fellows of the Academy, may be so certified and thus the public be informed as to fully qualified specialists throughout the city. The details of the proposal will be published in the Bulletin and only a summary is given here.

It is proposed that 2 classes of membership be created in the Academy to be known as "Members" and "Fellows". A doctor, being elected to membership becomes a "Member", qualifications for Members to remain the same as the present qualifications for "Fellows". Upon election a Member shall be assigned to the section of his choice. Each section, through its Advisory Committee, shall set up, with the approval of the Council, qualifications to which a member must conform if he desire to be promoted to Fellowship and designated as Fellow in that particular specialty represented by the Section. For example: Fellow of Internal Medicine, or Fellow in Gynecology, etc. In general the qualifications required shall be similar to those set up by various national associations and societies in the special fields.

A Fellowship Committee, corresponding to the Committee on Admissions, shall be elected from representatives designated to the Nominating Committee by each of the sections. When a member of any section shall have submitted to the Advisory Committee of his section sufficient evidence that he has met the qualifications approved for Fellowship in that section, his name shall be submitted to the Fellowship Committee in the same manner as applicants for membership are submitted to the Committee on Admissions. If the Fellowship Committee approves of the recommendation the member shall be voted upon by the Academy as a candidate for Fellowship of the New York Academy of Medicine in that branch represented by the section recommending him for Fellowship. Any present Fellow of the Academy will have the privilege of being also designated if he so desire, in the same manner. If approved by the Fellowship Committee and by the Council, he shall become a Fellow in the particular specialty, without further action by the Academy as a whole.

By the adoption of the proposed changes the

Academy will take a definite step toward real organization in the matter of specialism. And if our program for continued education eventuates there will be provided the facilities whereby the candidate for specialism may properly receive adequate training under competent supervision.

## HOW SCIENCE NIPPED AN EPIDEMIC

(Editorial, Newark Evening News, Jan. 17, 1931.)

Three reports of undulant fever reached the State Board of Health from somewhere in New Jersey. What undulant fever is, while doubtless of considerable moment to the sufferer, need not be debated or surmised. What is important is that the illness was promptly traced to raw milk and to the dairy producing it. The dairyman was immediately ordered to pasteurize all his milk, by authority of a law passed in 1915.

Not so many years ago the cause of the illness might have remained unknown, the source of the infection a mystery. It would have been the same had the malady been typhoid or something else. Science has done marvelous things in the interest of public health, as is of common knowledge, with the assistance of state and municipal regulations. It is just one manifestation of this that an isolated case of illness frequently leads to the discovery of a condition which might easily become an epidemic, taking toll of many lives.

In this instance, 3 cases of a certain illness attract attention. Science knows its probable cause. The source is found, and further danger is eliminated though recourse to a law framed to meet just such an emergency. Much sickness is prevented. Probably many lives are saved.

Sometimes the trail is not so plain. It may lead from the home to the little milk distributor and from him to the wholesaler. Inspection of many samples of milk from many herds of cows may be necessary. Thanks to efficient regulations, that is possible. These regulations, state and local boards of health, bacteriologists and inspectors who know every cow barn in the state are constantly guarding the public health. It is a comfortable thing to know.

## School Health Department

### STANDARDS FOR PREVENTION AND CONTROL OF CONTAGIOUS DISEASES

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton, N. J.

#### Opportunities at School

(1) Daily congregation of children at school facilitates observation, detection and supervision.

(2) Administrative organization of the school, together with the trained intelligence of its personnel, presupposes control of procedures and enforcement of regulations.

(3) Contact with the parents of pupils is always possible.

(4) Education, which is the chief function of the school, is the most effective approach to ultimate prevention and adequate control.

### Prevention is a Prerequisite of a Good School

- (1) Attendance at school by compulsion presupposes protection and safety for the pupil.
- (2) Attendance is bettered in direct proportion to the degree in which preventive measures are carried out.
- (3) Pupil health is essential to pupil progress at school.
- (4) A correct preventive procedure, rigidly enforced, demonstrates practically the principles and rules studied by the pupils in health education, thus serving to strengthen habits and attitudes.

### Responsibility of Teachers

- (1) The teacher has direct charge of the pupils and the classroom.
- (2) First contact with pupils at the opening of the morning session is that of the teacher. It is at this time that evidence of disease not present at the close of the last school day should be detected.
- (3) The teacher is the only one of the school staff in a position to observe pupils continuously during school hours.
- (4) Because of familiarity with the usual appearance of his pupils, the teacher is enabled by contrast to detect deviation from the usual or normal.
- (5) Preventive practices at school afford innumerable teaching situations by means of which pupils under guidance of the teacher may acquire desirable habits and attitudes, and the knowledge of prevention that will serve them in good stead throughout life. The practices and the lessons to be learned from them will each be stronger by reason of coordination.

### Program Necessary

Every school district should have a definite program of procedures, standards, and policies designed to meet local needs and to fulfill legal requirements.

Care and precision should mark its preparation. It should be complete in detail and scientific as to recommendations. Ease of understanding is also a prerequisite.

The program should be printed and given wide publicity throughout the community as well as in the schools. Its provisions should be classified according to the staff members who will use it; thus, "Standards for the Teacher", "Standards for the Janitor", and so on, will be available.

### Enforcement

Given a program, the school authorities should take steps to insure absolute enforcement of all provisions. Leniency at one point precedes a general weakening of the whole.

### Coöperation

(1) Of the board of health and the health officer. Maximum assurance of prevention and control depends to a large extent upon the degree to which interest, purpose and program are held in common by school and public health officials. That part of the school program which relates to (a) reasons for exclusion, (b) length of absence from school, and (c) recovery and readmission, should be formulated by the local health authorities.

Stated differently, the responsibility for prevention and control within the school rests with the educational authorities; while that concerning regulatory direction of the child outside of the school belongs to the public health authorities. Coöpera-

tion is necessary at several points as, for example, in reciprocal reporting of cases and releases, in immunization campaigns, in preparation and distribution of educative material, and in sanitary measures.

(2) Of practicing physicians. In efforts to carry on an effective program, it is essential that the school have the good will and coöperation of the physicians of the community. The school point of view of maximum protection for the individual and group, and of impartiality in conduct of its program, should be made known. It should be interpreted, and assistance in carrying it out requested.

(3) Of the home. Schools should give publicity to the reasons why children should be kept at home. An annual form letter stating the common indications of disease, and asking for coöperation of the parents in preventing disease-spread, is one effective way. All usual publicity methods should be utilized.

When a child is reported as having a contagious disease, the parents should be urged not to hasten his return to school but to exercise extra precaution lest the physical and nervous strain cause more serious possible permanent harm.

### Records and Reports

Operation of the program requires a correlated system of records, notices, and reports. Like the program, the forms and letters should be adapted to local needs and conditions, although for the most part there will be little need for variation.

## State Health Department

### PASTEURIZATION OF MILK

D. C. Bowen, Director New Jersey State Department of Health

Pasteurization of milk and cream becomes more important with the growth of cities and with the necessity for procuring milk from greater distances. Milk may be contaminated with pathogenic organisms on one farm, and contamination is easily spread throughout an enormous quantity of milk when such contaminated milk is mixed with milk from several farms at the receiving station.

Pasteurization of milk is the most effective safeguard known against the possibility of spreading typhoid fever, paratyphoid fever, scarlet fever, septic sore throat, undulant fever, diphtheria and dysentery through milk. Outbreaks of these diseases continue to be traced to the consumption of raw milk and only limited progress has yet been made in preventing the spread of infection through raw milk. Realizing that pasteurization of milk should be carried on under standard and uniform requirements in this state, the State Department of Health adopted specific regulations governing the construction and operation of milk pasteurizing plants in 1917. These requirements have been made more stringent from time to time until now pasteurization of milk in the plants of this state is carried on under rigid requirements.

Milk in the process of pasteurization is required to be heated to a temperature of 142° to 145° F., and maintained at that temperature for a period of 30 consecutive minutes. This temperature and holding period allow sufficient margin of safety over the minimum degree necessary for complete destruction of possible disease-producing organ-



isms that might be spread by milk. Such margin of temperature is always necessary in all commercial pasteurization plants. Immediately following the period of heating, the milk is required to be cooled down to a temperature of 50° F. or below and maintained at such temperature until delivered to the consumer. Records of the temperature to which milk is heated are required to be made by recording thermometers, dated and filed at the pasteurizing plant for inspection by agents of the State Department of Health. The accuracy of these recording thermometers is to be checked daily by the operator with an accurate indicating thermometer. Gross inaccuracies in pasteurizing temperatures seldom occur nowadays, as milk dealers and operators are anxious to have their temperatures check accurately. This is a protection not only to the milk consumer but an advantage to the milk dealer. The latter realizes that insufficient pasteurizing temperatures or time of holding will call for severe criticisms of health department representatives who are anxious to safeguard and consumers of milk, while too high temperatures (above the usual pasteurizing range) may react unfavorably upon the milk product by interfering with cream-line, taste or other marketable qualities.

Milk pipes and pipe fittings are required to be disconnected and thoroughly cleaned after use. Receiving and holding vats, coolers and bottle filling machines must be built of metal or other suitable material and provided with closely fitting metal covers. Bottles, cans or other receptacles for pasteurized milk must be thoroughly washed and sterilized. Mechanical bottle filling and capping machines are required to be used in the bottling of pasteurized milk.

Before a license is granted by the State Department of Health to operate a milk pasteurizing plant, assurances that these requirements will be carried out must be given by the applicant. Mechanical imperfections in pasteurizing apparatus, such as leaky valves, dead-ends in milk lines, are becoming things of the past not only because of the vigilance of health officials but through the technical interest of dairy engineers and manufacturers. Capping of bottled pasteurized milk with the hands is prohibited by the state pasteurizing regulations. Cleanliness of equipment used in pasteurizing plants, such as the pasteurizing vats themselves, receiving and storage vats, milk pumps and pipe lines, filters, coolers, bottle-fillers and cappers, is demanded at all times. Proper cleansing of milk bottles, cans or other containers for milk also receive their share of attention by inspectors. The department is firm in its belief that pasteurization was never intended as a substitute for cleanliness in milk production or plant operation. The process is, and should be, an added safeguard to milk that has been produced by clean, healthy cows, milked by clean healthy milkers or clean milking machines, and handled and cooled under clean, sanitary conditions.

The department's greatest need along the line of increased supervision of pasteurizing plants is the employment of additional inspectors to check the various processes incident to proper pasteurization and handling of milk more frequently than is possible at the present time. Just as 2 salesmen of equal ability and like traveling facilities can cover more ground in less time than only 1, so 2 trained inspectors of equal capacity can accomplish more than 1 in the proper supervision of pasteurizing plants.

The State Department of Health issues licenses

for the operation of pasteurizing plants without a fee, after inspection by our agent proves that the requirements of this department are fulfilled. The oft-repeated inspections of pasteurizing plants, including careful examinations into details of operation, which have been made by agents of the State Department of Health and the local boards of our larger cities since the law was passed in 1915, account for the excellent condition of the plants of this state and also for the efficiency with which milk is pasteurized.

The number of plants pasteurizing milk has increased steadily from 85 in 1915 to the present total of 197. Most of the new plants are used for the pasteurization of relatively small quantities of milk in the smaller cities and towns. Inspection of such small plants falls almost entirely upon the State Department of Health, as the inspectors of small communities generally lack the knowledge and experience necessary to undertake such technical inspection.

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## Communications

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### FIFTEENTH ANNUAL CLINICAL SESSION OF THE AMERICAN COLLEGE OF PHYSICIANS

The Fifteenth Annual Clinical Session of the American College of Physicians will convene in Baltimore, Maryland, March 23-27, and in Washington, D. C., March 28, 1931. The organization holds this session in Baltimore through the cordial invitation of the Johns Hopkins University School of Medicine, the University of Maryland School of Medicine, the Medical and Chirurgical Faculty of the State of Maryland, the Baltimore City Medical Society, and the further coöperative interest manifested by the various Baltimore hospitals and civic societies. Held in important medical centers, these Clinical Sessions constitute, perhaps, the most important post-graduate week in internal medicine each year. Those who attend the meeting will find ample in the way of clinical, laboratory, research and historic interest, well to repay them for the time spent in making the journey. Dr. Sydney R. Miller, of Baltimore, President of the American College of Physicians, has prepared the program for the General Scientific Sessions, while Dr. Maurice C. Pincoffs, General Chairman, also of Baltimore, has arranged the program of clinics, demonstrations and entertainment.

As an added feature of the Clinical Session this year, an additional day, March 28, will be spent in Washington, D. C., where a special program of clinics and inspection tours has been arranged under the auspices of the Medical Departments of the U. S. Army, U. S. Navy, U. S. Public Health Service and Georgetown University. Dr. William Gerry Morgan is acting as Chairman of the Washington Committee.

Hotel headquarters will be at the Lord Baltimore Hotel, while general headquarters, at which the registration of members, commercial exhibits and all general sessions will be held, will be The Alcazar, Cathedral and Madison Streets, Baltimore. Transportation on the Certificate Plan of reduced fares will be available to all physicians and dependent members of their family from all parts of the United States and Canada. A special program of entertainment has been arranged for visiting ladies. The Convocation for the induction

of new members, as Masters or Fellows, will be held on Wednesday evening, March 25, and the Annual Banquet will be held on Thursday evening, March 26. The Business Meeting, at which reports of administration and elections for the new year will take place, will be held during the forenoon of Thursday, March 26.

Mr. E. R. Loveland, 133-135 S. 36th Street, Philadelphia, is the Executive Secretary of the College, and it is to him that requests for further information or programs should be addressed.

### AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

(Announcement by the Secretary, Dr. J. R. Yung)

The American Association for the Study of Goiter again offers an award of \$300 for the best essay based upon original research work on any phase of goiter presented at its annual meeting in Kansas City, Mo., April 7-9, 1931. It is hoped this offer will stimulate valuable research work, especially in regard to the basic cause of goiter.

Competing manuscripts must be in the hands of the Corresponding Secretary, J. R. Yung, M.D., Terre Haute, Indiana, not later than April 1, to permit the award committee sufficient time to examine all data. Manuscripts arriving after this date will be held for the next year or returned at the author's request.

## Woman's Auxiliary

### PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

#### The Eastern District

Mrs. W. Wayne Babcock,  
Philadelphia, Pa.

According to the Constitution of the National Auxiliary, the First Vice-President is automatically Chairman of Organization, the 3 other Vice-Presidents being organizers for their sections of the country. Mrs. Southgate Leigh, of Virginia, therefore, holds this chairmanship, and the Eastern District is her particular responsibility. At her request a series of 4 articles is being prepared by her committee in order that each district may be made better cognizant of the progress of its own states. The individual state journals have been extremely generous in the space allowed their auxiliaries and this additional courtesy of reporting the auxiliary situation in other states is deeply appreciated, for there is a growing desire to know "what others are doing".

New Hampshire stands alone as the only New England state 100% organized and cooperating with the national organization. Last year the state auxiliary had misgivings as to its necessity and usefulness but an urgent request from the medical society that the women remain organized, dispelled all doubts. During the year following, Mrs. Hubbard, wife of the State Society President, visited every county and encouraged and stimulated the growth of unit auxiliaries.

The New Jersey Auxiliary members made pilgrimages to state institutions, set apart one meeting when the mothers of physicians were entertained, and sponsored various health meetings.

The Essex County Auxiliary, assisted by the physicians, succeeded in establishing a course of health talks in cooperation with the Y. W. C. A., of Newark, emphasizing especially prenatal care and information which would aid the mothers of babies and young children. Last year Mrs. James Hunter, Jr., New Jersey's State Auxiliary President, visited every county, as did Mrs. Walter Jackson Freeman, in Pennsylvania, during her presidency. One cannot help drawing the conclusion that personal contacts are necessary for county auxiliary development and success.

Virginia is active in spots. The doctors encourage the auxiliaries because they believe that through them education with regard to the menace of state medicine can be spread.

Ohio for several years has been sending representatives from a few organized counties to the national meetings but as yet there is no state organization. Our friend and adviser, Dr. Upham, who lives in Ohio, it is felt will advise the National Auxiliary when the auspicious time arrives for establishment of a State Auxiliary.

The District of Columbia seems so completely diverted by Washington affairs that the auxiliary which so capably cared for the A. M. A. meetings some years ago seems to have gone into retirement.

Delaware, in a breathless, better-late-than-never manner, has completely caught up and is most interested and active, and has entered upon serious work by assisting the physicians in establishing a medical library in Wilmington. They will cooperate with Philadelphia at the time of A. M. A. Convention and the eastern section will introduce them with pride to the National Organization. West Virginia is up and doing and you may expect still better things from that state this year.

Maine, Massachusetts, Rhode Island, Vermont and Maryland have reported some interest among individuals but no organized effort. Queries from different localities in New York, as to why there is no auxiliary, have been answered with the statement that several years ago the House of Delegates voted unanimously in favor of the auxiliary and authorized its organization, but nothing has since been accomplished. The same year Connecticut voted favorably but no definite steps have been taken toward organizing.

Pennsylvania has surely discovered the rhythm in which its auxiliary work is best done, for concrete accomplishments have been turned out regularly, year by year. Of the \$3000 contributed last year to the Medical Benevolence Fund more than two-thirds was contributed by the Auxiliary. A definite trend toward educational meetings is felt all over the state, and socially it is hoped that the carefully formed Philadelphia plans for the next meeting will bring honor and glory to the Keystone State. Not only are the adult members of the auxiliary meeting but a group of the most charming and good-looking daughters of doctors are working together in order that they may come to know each other and to work in unison for the comfort and pleasure of the A. M. A. guests when they come to Philadelphia in May. Verily, who can question the wisdom of the auxiliary, when it brings about so much willing work in behalf of the medical men of the country?

### ATTENTION LADIES!

The following brief article is quoted from the Journal of the Indiana State Medical Association and commended to our auxiliary members for consideration. We respectfully recommend that the



advice be taken; that is, that county auxiliaries, as organizations and individual auxiliary members, write to *The Delineator* expressing condemnation of the use of its pages for such pernicious "health talks".

Attention Ladies

In the September 1930 number of *The Delineator*, Celia Caroline Cole presumes to give some sage medical advice, and as treatment "for the puffy look around the eyes and lines and wrinkled lids", among other things she says: "Eye exercises—spectacles if you have to have them, but better take the eye exercises and have a good osteopath adjust the nerves in the back of the neck and backbone and then dispense with spectacles." Further on she says: "Use a nourishing cream on the lines and a mild astringent on the puffiness. Learn to rest your eyes by palming, or when you are out in public and can't palm merely by thinking of lovely things you have seen—feel the eyes relax with pleasure—or by thinking of deep, deep, smoky, floating, velvety black."

Think of feeding such tommyrot to sensible readers and imagine, if you can, how idiotic this advice appears to many intelligent readers whether they know much about scientific medicine or not. Just how the proprietors and owners of *The Delineator* can square themselves after accepting for publication such nonsensical stuff remains to be seen, and it is more difficult to understand why *The Delineator* permits its pages to be so prostituted. As a suggestion to the members of the Woman's Auxiliary of the American Medical Association we recommend that each and every one of them write a letter of protest to *The Delineator*, and accompany it with the request that *The Delineator* make suitable amends or cancel the subscription of the writer. You can bet a dollar against a punched nickel that if even a few hundred members of the Woman's Auxiliary, with their influence in women's clubs, attack *The Delineator* for printing such untrustworthy information as herein quoted, there will be a right-about-face policy adopted by the publishers and owners of *The Delineator*. Intelligent people do not want their favorite periodicals to be dealing out false, unscientific and untrustworthy articles concerning the practices of medical pretenders, and if the owners and publishers of *The Delineator* are wise they will not have a repetition of articles such as the one to which we refer.

STATE SOCIETY AUXILIARY

Reported by Mrs. W. Blair Stewart

Mrs. John Nevin, of Jersey City, President of the Woman's Auxiliary to the Medical Society of New Jersey, presided at an open Executive Committee meeting on Monday, January 12, at noon, in the Princeton Room of the Stacy-Trent Hotel, Trenton; after which a most delectable luncheon was served in the Roof Garden. There were present representatives also from the auxiliaries to the medical societies of Pennsylvania and Delaware.

Mrs. George N. J. Sommer, as Chairman of Arrangements for the day, welcomed the assembled guests in her usual charming manner and introduced those who took part in the beautiful musical program. These were Mrs. D. Hartley Sinclair, soprano, and Mrs. Charlotte Magill, pianist.

After the luncheon the president introduced the main speaker of the afternoon, Mrs. Walter Jackson Freeman (daughter of the well loved and eminent surgeon, Dr. W. W. Keen, of Philadelphia), who is Chairman of Arrangements for the

Auxiliary meeting with the American Medical Association Convention June 8-12. Mrs. Freeman stressed the point that this is to be a *national* and not in any way a *local* affair—and that every member from the hostess states is to be a real hostess to every guest.

Another committee meeting was held to plan for the State Medical Society Convention to be held in Asbury Park during the first week of June 1931.

Preliminary Program

Woman's Auxiliary to the American Medical Association

Ninth Annual Meeting

Philadelphia, June 8-12, 1931

Headquarters Bellevue-Stratford Roof Garden

(Every member must register in order to obtain cards for the various social events at the Convention.)

Monday, June 8

12.30 p. m.

Luncheon to Presidents, 1922-31 .. South Garden  
Subscription

2-4.05 p. m.

Three Round Tables, 35 minutes each with 10 minute intermissions ..... North Garden

Subjects: (1) Program for County Auxiliary Meetings.  
(2) National Study Envelopes.  
(3) The Technic and Value of Auxiliary Contacts with the Community.

6.30 p. m.

Board Dinner, subscription ..... Red Room

7.30 p. m.

Board Meeting ..... Red Room

Tuesday, June 9

9 a. m.

General Meeting ..... North Garden  
Luncheon in South Garden (Bellevue Special).

2 p. m.

Bus Trip to Valley Forge with tea in Log Cabin.  
Hostesses to be announced.

or

Boat Trip on Delaware with tea on board.  
Hostesses to be announced.

8 p. m.

General Meeting of American Medical Association

10 p. m.

Supper Dance, subscription ..... Rose Garden

Wednesday, June 10

9 a. m.

General Meeting and Election .... North Garden

12.30 p. m.

Auxiliary Luncheon, subscription .. Rose Garden  
Guests and Speakers from American Medical Association.

2.30 p. m.

Bus Trip through Historic Philadelphia, Fairmount Park and Germantown with tea to be announced.  
Host, American Association.

9-11 p. m.

Reception, to be announced.  
Hostesses, Pennsylvania State Auxiliary.

**Thursday, June 11**

9 a. m.

Board Meeting ..... Red Room

10.30 a. m.

General Round Table ..... North Garden

Subject: What Have I Gotten Out of the Convention?

Luncheon in South Garden (Bellevue Special.)

2 p. m.

Bus Trip to be announced.

9 p. m.

President's Ball.

Host, American Medical Association.

**Friday, June 12**

9.45 (?) a. m.

Trip to Atlantic City (special cars).

or

Trip through Wanamaker's with luncheon in Crystal Tea Room.

*All transportation paid by members.***Atlantic County**

Reported by Mrs. Maurice Chesler.

The December meeting of the Woman's Auxiliary to the Atlantic County Medical Society was held on December 8 in the Blue Room of the Chalfonte Hotel at 8:30 p. m.

In the absence of our President, Mrs. J. T. Beckwith, Mrs. John F. Massey presided.

Minutes of previous meeting were approved as read.

In keeping with the holiday spirit, it was suggested that the auxiliary spread Christmas Cheer to the needy, and a motion was carried to donate to the following:

Atlantic County Hospital for Tuberculous Diseases: woolen gloves, socks, writing material; Atlantic City Day Nursery: flat silverware; Betty Bacharach Home at Longport: wash cloths; Municipal Hospital: woolen undergarments for children; Santa Pals of Atlantic City: \$10.

After the meeting cards were enjoyed.

**January Session**

The January meeting was held on January 9, Mrs. J. T. Beckwith presiding.

In the absence of our Recording Secretary, Mrs. Lawrence Wilson, the minutes were held over until next meeting.

Letters of thanks were received from the Atlantic City Day Nursery, Atlantic County Hospital for Tuberculous Diseases, and from the Santa Pal Fund, for donations received from the Auxiliary during the Christmas holidays.

Tentative plans were made for a Card Party for the benefit of patients of the Atlantic County Tuberculosis Sanitarium.

Mrs. W. Blair Stewart, Mrs. John F. Massey and Mrs. Samuel L. Salasin will represent Atlantic County at the Executive Committee Meeting of the State Auxiliary in Trenton. Several of our members will also attend the Tea to be given by the Camden County Medical Society Auxiliary.

Motion was made to send plants to Mrs. Mark J. Haley and Mrs. Lawrence A. Wilson, who are ill. Motion was also carried to accept with regret the resignation of Mrs. William Martin.

**Camden County**

Reported by Mrs. A. J. Casselman

The Woman's Auxiliary to the Camden County Medical Society entertained its neighboring clubs and county auxiliaries January 13 at a very delightful reciprocity meeting at the Camden Woman's Club House, 424 Linden Street, Camden. The meeting was filled with a fine spirit of hospitality and coöperation. It was presided over by the president of the auxiliary, Mrs. Arthur J. Casselman, who extended a cordial greeting to the guests.

Mrs. A. Haines Lippincott, the Program Chairman, made a strong plea for aiding the helpless, those in dire need, and to do everything to give work to the unemployed. She then introduced the speaker of the afternoon Dr. Francis Harvey Green, of the West Chester State Normal School. His subject was "The Spirit of Inquiry". The main points taken were: "How are you? How do you do? Are you agreeable to live with? and What are you good for?" Dr. Green is always a most interesting and amusing speaker; no naps are taken!

Mrs. Walter Jackson Freeman, Chairman of the Auxiliary Entertainment for the American Medical Association Convention, spoke very effectively of the program as arranged and of the duties of the hostess states.

All New Jersey members are to be co-hostesses with those of Pennsylvania. Mrs. J. Newton Hunsberger, of Norristown, Pa., President of the National Auxiliary, brought a greeting. She spoke earnestly of the work of the county society, and how there could not be national work without the work of the state society; neither could there be a state society without the work of the county society, which is the foundation stone.

**Essex County**

(A note from Mrs. McCauley)

The County Society Auxiliary has planned a Theatre Party for the benefit of its scholarship fund, to be held at the Lyceum Theatre, East Orange, on the evenings of February 16 and 17. The guest star will be Miss Margaret Anglin. Look out for advertisement of the event, giving full particulars.

**Passaic County**

Reported by Mrs. Richard J. McDonald

The Woman's Auxiliary to the Passaic County Medical Society held the first meeting of this year at the Paterson Woman's Club, Thursday afternoon, January 15, at 2.30 p. m.

The President, Mrs. William Neer, presided. A most interesting and instructive program was furnished by the following speakers: Mrs. James F. Radcliffe, President of the Children's Day Nursery, spoke on "The Care of Day Nursery Children". Miss Anna McGeachie, Supervisor of Speech Defect Department in Paterson Schools, spoke on "Corrective Speech". Miss Elizabeth K. Watson, Supervisor of Special Classes in the City of Paterson, spoke of "Backward Children".

Each speaker explained her particular line of work and brought to the listeners' minds the different agencies which are constantly at work to improve the lives and opportunities of the less fortunate children, socially, physically and mentally.

The meeting was largely attended.

Following these talks, tea was served and a social hour enjoyed.



### Somerset County

Reported by Mrs. Dan Renner

The Woman's Auxiliary to the Somerset County Medical Society held its second meeting at the Nurses' Home of the Somerset Hospital, December 13, 1930. The minutes of the previous meeting were read and approved. Mrs. Renner reported the receipt of several new subscriptions to Hygeia. This means an addition to the funds in the treasury.

The duly elected officers for this year are: President, Mrs. C. R. Kay, Peapack; Vice-President, Mrs. J. Meigh, Bernardville; Treasurer, Mrs. E. Flint, Raritan; Corresponding Secretary, Mrs. D. Renner, Skillman; Recording Secretary, Mrs. L. Ely, Somerville; Reporter, Mrs. A. Levy, Somerville.

A motion was adopted that a card party be held in the near future to raise funds for our share of the entertainment at the next A. M. A. Convention.

The women, upon adjournment of their own meeting, were invited to join the men in viewing motion pictures issued by the Petrolagar Laboratories. At the close of the meeting, Mrs. Daisy Kingston, Superintendent of the hospital, served delicious refreshments. Altogether, it was an enjoyable meeting and an afternoon well spent.

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### Union County

#### Special Meeting

Reported by Mrs. H. V. Hubbard

A committee of members attended a luncheon January 9 at the home of the President, Mrs. H. V. Hubbard, in Plainfield, and plans were made for programs and work for the current year.

The resignation of the Secretary, Mrs. Russell Shirrefs, of Elizabeth, was read. This will be acted upon at the next meeting when her successor will be appointed.

The next regular quarterly meeting will be held in the Nurses' Home of the Elizabeth General Hospital, Wednesday evening, January 14, when matters of great importance will be considered.

Mrs. Russell Shirrefs will be the speaker. Her subject will be "Making a Small Garden".

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#### Regular Meeting

Reported by Mrs. M. M. Hoffman

The regular meeting of the Woman's Auxiliary to the Union County Medical Society was held in the Nurses' Home of the Elizabeth General Hospital, Elizabeth, Wednesday evening, January 14, Mrs. Hubbard, President, in the chair.

Mrs. McElhinney, Treasurer, reported balance on hand of \$100.96.

The resignation of Mrs. Shirrefs as Secretary was read and accepted with regret. Mrs. C. A. Hoffman, of Plainfield, was elected Secretary to fill the unexpired term of Mrs. Shirrefs. Mrs. H. Johnson, of Plainfield, was elected Assistant Secretary for the same period.

Mrs. Schlichter's letter of appreciation and thanks for flowers received during her recent illness was read and accepted.

Mrs. Shirrefs moved that the following program read by Mrs. Hubbard be accepted and carried out. Motion seconded and carried.

On February 16 a luncheon at the Winfield Scott Hotel in Elizabeth, when Mrs. John Nevin, of Jersey City, State Auxiliary President, and Mrs. H. Roy Van Ness, of Newark, President-Elect, will speak and be guests of honor.

In March, a luncheon and card party to be held in Plainfield.

April—Regular Quarterly Meeting will be held with Book-Review following.

May—Dinner and entertainment with the members of the Union County Medical Society as guests of honor.

June—State Medical Society Convention at Asbury Park and the A. M. A. Convention at Philadelphia.

July—Last quarterly meeting of the year.

Mrs. George L. Orton, of Rahway, gave a report on the mid-winter luncheon and meeting of the State Auxiliary Executive Committee held in Trenton last Monday. She also reported the many attractive features of the program being planned by the auxiliaries of Pennsylvania, New Jersey and Delaware to entertain the National Auxiliary during the sessions of the American Medical Association in Philadelphia in June.

Mrs. Shirrefs' talk on "How to Make a Small Garden" was postponed until a spring meeting.

A door prize was won by Mrs. Bunting, of Elizabeth.

Refreshments were served in the company of the Union County Medical Society in the dining room of the hospital.

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## County Society Reports

### ATLANTIC COUNTY

John S. Irvin, M.D., Reporter

The regular monthly meeting of the Atlantic County Medical Society was held Friday evening, January 9, at the Hotel Chalfonte, Dr. Norman J. Quinn presiding.

A motion was passed to reconsider the offer of the Dawley Collection Agency, which was tabled at the last meeting, and to instruct the president to appoint a committee to investigate the offer; Drs. Scanlan, Shivers and Carrington were appointed.

The Secretary announced that an application for membership had been received from Dr. Joseph Smurl. This was referred to the Board of Censors.

A letter from Dr. Reik was read concerning a renewal of post-graduate study sponsored by the State Society and Rutgers University. It is proposed to offer courses on numerous subjects of interest to the general practitioner and the specialist. The president appointed the same committee which had this matter in charge last year to make whatever arrangements it deems wise; Dr. Carrington is chairman of this committee.

Communications were read from Senator Richards and Assemblymen Siracusa and Altman, in reply to letters sent them embodying the protest of this society against the proposed changes affecting the State Board of Medical Examiners. Assemblyman Siracusa said he would give the matter his attention. Assemblyman Altman said he would do everything he could. Senator Richards refused to comply with the wishes of the society and stated his reasons.

The first paper on the scientific program was "Leukorrhea—Its Significance and Treatment", by Dr. P. Brooke Bland, Prof. of Obstetrics, Jefferson

Medical College. As Dr. Bland was confined to his bed by illness, his paper was read by Dr. Leopold Goldstein of the Department of Obstetrics, Jefferson Hospital. (To be published later.)

The next paper was read by Prof. David H. Wenrich, of the Department of Zoology, University of Pennsylvania, on "The Morphology of *Trichomonas vaginalis* as Found in Leukorrhea".

Dr. Wenrich said:

The study of *Trichomonas vaginalis* from a biologic point of view requires that we determine not only its morphology, but also its mode of life, method of reproduction, and relation to other species found elsewhere in the human body and to species found in other animals. The micro-organism shows the characteristics common to trichomonad flagellates in general: fusiform body, whip-like flagella attached to the anterior end, an undulating membrane along one side, and an axostyle protruding posteriorly. This species is the largest of the trichomonad flagellates found in man, varying from 10 to 30 microns in length in the living state. It has 4 anterior flagella; a relatively short undulating membrane, accompanied by a chromatic basal rod, usually not extending much beyond the middle of the body; a rather large and elongated nucleus; and a parabasal apparatus consisting of a sausage-shaped parabasal body and longer parabasal fibril. The parabasal body is rendered visible only after special methods of staining. The organism multiplies by binary fission. No true cysts have been found although rounded-up stages which may persist for 1-2 days have been seen.

*Trichomonas buccalis*, found in the human mouth, resembles *T. vaginalis* but is usually much smaller, ranging from 6-12 microns in length. It has 4 anterior flagella, an undulating membrane slightly longer than that in *T. vaginalis*, a nucleus that is commonly smaller and more deeply staining, and a parabasal apparatus similar to that of *T. vaginalis* but with a much shorter or biscuit-shaped parabasal body, and there are fewer chromatic granules in the protoplasm.

In contrast to these species, *Pentatrichomonas ardin delteili* of the intestine is intermediate in size and has 5 anterior flagella; a group of 4 and a single one attached to a separate smaller blepharoplast. It also has a full-length undulating membrane and chromatic basal rod, a trailing flagellum and a larger cytotonic. The protoplasm usually lacks the chromatic granules seen in the other species and no parabasal apparatus has been found. It should be emphasized, therefore, that *Trichomonas vaginalis* and *T. buccalis* resemble each other much more than either resembles this intestinal form. Hence, it does not seem reasonable to believe that the vaginal form is derived from the intestine, as is commonly supposed.

In literature, *Trichomonas hominis*, with 4 anterior flagella, is generally described as occurring in the intestine, but in the present study all of the 15 available cases of intestinal trichomoniasis had flagellates corresponding in body morphology to that of *Pentatrichomonas*, although the flagella could not be counted in all cases. It is, therefore, suggested that *Pentatrichomonas* is the common form in the intestine and that *Trichomonas hominis* is the same species in which one flagellum has heretofore been overlooked.

Recently, Cleveland has described a new species, *Trichomonas fecalis* from the intestine of man. This has thus far been found in but a single human subject. It resembles so closely a species of *Trichomonas* found in frogs and toads that one is

led to inquire as to whether a parasite of a cold-blooded host may become a facultative inhabitant of the human digestive tract. This possibility is being investigated.

These papers were discussed by Drs. Carrington, Darnall, Barbash and Kilduffe. Following discussion, Dr. Goldstein and Prof. Wenrich demonstrated live cultures of *Trichomonas vaginalis* under the microscope.

#### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The meeting of the General Staff of the Atlantic City Hospital was held December 26, 1930, in the Nurses' Auditorium, and was called to order by David B. Allman, President.

Dr. C. H. deT. Shivers, Chief of the Urologic Department, gave a report of the past 12 months.

On account of our excellent results in a field of surgery that deals mostly with the aged and poor risks, we submit this report to you with a great deal of satisfaction. The Urologic Service in the Atlantic City Hospital, we are proud to say, is growing. In the past we did half or more of our surgery in the Atlantic City Genito-Urinary Clinic; we are now doing all the so-called clean work in the Atlantic City Hospital, leaving only those cases complicated by active venereal infection for operation in the Atlantic City Genito-Urinary Clinic.

It is highly important in so complicated a specialty as urology to have the surgical branch in a hospital with a well equipped laboratory, x-ray and other departments. For example, it is impossible to make an accurate diagnosis with the cystoscope of diseases involving the upper urinary tract without the aid of x-rays. Radiography is so important that a pyelogram should be made in every case where a thorough study of the kidney and ureter is indicated. A ptosed kidney, calculus, kink, strictures, dilated ureter, or kidney tumor can be found by this method.

We constantly strive to improve the technic of our prostatic operations and are giving more care to pre-operative and postoperative treatment. We constantly keep in mind the danger of hemorrhage following enucleation of the gland and are prepared to control it so far as humanly possible; and in doing so we save lives that otherwise would be lost. Hemorrhage *per se* is not the direct cause of death in the majority of cases, but indirectly it plays a major part. In cases where the bleeding is thoroughly controlled before the bladder is closed there is a much greater chance for recovery and a rapid convalescence. It is a dangerous procedure to close the bladder after enucleating the prostate if there is even a little bleeding, without first ascertaining the patient's systolic blood pressure; especially important in cases that show a high pressure prior to operation. It is not uncommon for the systolic pressure to drop 40 to 60 mm. Hg. during the operation, and in such patients very little if any bleeding will follow removal of the gland. However, it is extremely important for the surgeon to take precautions to control the subsequent hemorrhage which is sure to follow when the blood pressure rises. We are using the Pilcher modification of Hagner's bag, which allows the surgeon to make pressure for control of hemorrhage, or release it at his will. Another important factor in control of hemorrhage is suturing of the posterior lip of the bladder outlet, from 3 to 9 o'clock, using a continuous



00 plain catgut suture. This takes in the prostatic capsule, torn internal sphincter, and mucous membrane of the bladder. It is often necessary in cases that bleed severely to place mattress sutures on either side of the bladder outlet from 3 to 5 and from 9 to 7 o'clock, but this method of suturing will control troublesome arterial bleeding.

Our report comprises a list of 50 operations with only 1 death, making a mortality rate of 2%. When we review the type of cases operated upon and their complications we feel that this is a low mortality rate. Suprapubic prostatectomies head the list; 11 consecutive operations without a single death. It was necessary in 2 instances to do a two-stage operation; in the first because it was impossible to pass a catheter through the urethra to relieve an acute retention, and in the second because of hyperacute infection of the bladder.

Next on the list are 8 suprapubic cystostomies; 2 were done preliminary to a second stage suprapubic prostatectomy and 1 preliminary to removal of stone in a urethral diverticulum in a female patient; 2 for removal of vesical calculus and 3 for fulguration of carcinoma of the bladder and implantation of radon seeds. A very interesting case was that of the colored female who was transferred to us from the Gynecologic Service, with a large diverticulum of the urethra which contained a rather large uric acid stone. Suprapubic cystostomy was done to divert the urinary stream and prevent subsequent vaginal urethral fistula; later, the stone was removed and diverticulum resected. The suprapubic sinus was allowed to heal and she has made a complete recovery.

Other operations included 2 hydroceles; 1 varicocele; 5 orchidectomies; 3 epididymectomies, and 5 perineal cystostomies.

Dr. Charles Bossert, Associate, presented a brief résumé of the work performed in the Genito-Urinary Clinic during 1930:

Syphilis, new cases	male	152		
	female	132	total	284
Gonorrhea, new cases	male	208		
	female	15	total	223
Treatments given				
Syphilis	male	2522		
	female	2898	total	5420
Gonorrhea	male	2117		
	female	148	total	2265
Blood Wassermann		869		
Dark fields		14		
P. and V. and U. smears		258		
Spinal Wassermann		11		
Cystoscopic examination		25		
Adenotomy		12		
P. and V. injections. Iodin per rectum		6		
Bartholin abscess opened		1		
Peri-urethral abscess drained		2		
Venereal warts fulgurated		2		

Dr. M. H. Axelrod presented a cystoscopic report totaling 102 cases, with classification of conditions found.

Before reporting a special case, I wish to discuss briefly the history of tumors of the bladder. Until the last century, tumors of the bladder were completely ignored by surgeons; until the end of the fifteenth century, no mention of their existence was made by any authors. Finally, near the end of the sixteenth century, there appeared the first mention of excrescences of the bladder, and many theories were put forward in explanation. The first work on tumors of the bladder was published by

Lacuna in 1551. The diagnosis was principally made from symptoms of painful and difficult urination. For 200 years following Lacuna very little progress was made in knowledge of vesical tumors; very little was added either to the method of diagnosis or treatment until the eighteenth century, though some ingenious instruments were devised to give relief to such unfortunate patients.

Civalle and others began in the nineteenth century to practice operative procedures on these tumors through the suprapubic region. With invention of the cystoscope came a rapid development in early diagnosis, study and treatment of vesical tumors. Dr. John T. Geraghty stated that in looking over the records of the Johns Hopkins Hospital from 1885 to 1896 it was interesting to note that no case of tumor of the bladder was admitted to the wards in which a diagnosis was made sufficiently early to warrant anything more than suprapubic drainage. It is probable that the early records of other large hospitals will show the same sad series of inoperable tumors of the bladder. With development of the cystoscope and knowledge of the importance of investigating apparently innocent hematuria, a new era arose. Nitze, in 1896, reported a large series of cases in which he had succeeded in completely eradicating the tumors by his ingenious operating cystoscopes. The endovesical treatment of bladder tumors did not receive any particular encouragement until Beer, in 1910, reported a method of treating papillomas by high frequency current. More recently the addition of radium to our therapeutic armamentarium promises even more encouraging results.

Case Report. J. K., aged 65, colored, was thrown from a truck Oct. 17, 1930, and sustained a contusion of the neck and spine. He gave history of hematuria for 9 months.

Laboratory reports: Urinalysis, 5 mgm. percent albumin and an occasional leukocyte. Blood chemistry—marked secondary anemia. Wassermann and Kahn, both plus 4.

X-ray report: No evidence of fracture of the upper cervical spine or skull.

Cystoscopic diagnosis: Multiple pedunculated papillomas, with short pedicles, on the right side of posterior wall of the bladder a short distance from the base. Some enlargement of the lateral and median lobes of the prostate. He was referred to the Genito-Urinary Clinic for antiluetic treatment prior to operation. He was readmitted 4 weeks later for operation. Under spinal anesthesia, the entire area was destroyed in one sitting, using the bipolar current. Since operation he has been free of bladder symptoms and is now continuing antiluetic treatment at the clinic.

Dr. D. C. Reyner reported a case of "Urogenital Tuberculosis". C. G., white, male, aged 46, was admitted Sept. 15, 1930, complaining of great difficulty in urination. He had been under treatment at Pine Rest in June for pulmonary tuberculosis and remained there for 28 days. Since October 1929 he has lost considerable weight; has had frequent colds, some of these accompanied by high fever, chills, sweats and severe malaise. Has been steadily getting worse and in September 1930 began to complain of frequent and difficult urination. On September 15 he had an acute, complete urinary retention and collapsed in a faint. Relief of his abdominal pain and distress was obtained by catheterization.

Examination of the chest showed an advanced active pulmonary tuberculosis involving both upper lobes. Examination of the external genitalia

showed a markedly enlarged, and quite painful and tender epididymis on the right side. Rectal examination showed the prostatic gland enormously increased in size; felt to be smooth, slightly irregular in outline, but firm and elastic and without any evidence of malignancy or fluctuation.

The patient wore a retention catheter for 3 days, after which he was able to void with fair ease. At this time an area of fluctuation was noted at the lower pole of the right scrotum and involved the tail of the right epididymis. On September 21 the area was incised, under novocain anesthesia, and a large amount of foul smelling pus escaped under pressure; sinears from this pus showed numerous tubercle bacilli. A radical epididymectomy was not done in this case because of the generalized tuberculous condition existing; and, further, the opposite side would later have become involved anyway—such infection extending across the prostate which in these cases acts as a bridge.

Until discharged from the hospital, 12 days after admission, he made some progress. There was still a discharging sinus present where the epididymal abscess had drained, the prostate was still very large and there was a beginning small soft area palpable on the right side, but he was anxious to go home and since he was able to void with ease, with the exception of some burning and pain, he was permitted to leave the hospital with instructions to return in a week. The following day he was readmitted with complete urinary retention. Following a catheterization, examination showed no change except a greater area of softening in the right lateral lobe of the prostate. Prostatotomy was done under spinal anesthesia. It was most difficult in this case, because we were unable to elevate the prostate forward or to make use of retractors to expose the base of the gland, because of very dense adhesion. The prostatic urethra was opened, which we are always able to avoid in cases not complicated by tuberculosis. Following evacuation of the pus a small fenestrated rubber tube was inserted into the lobe, brought out through the perineum, and sutured to the skin. We were unable to demonstrate tubercle bacilli in the prostatic abscess, but feel certain that it was a tuberculous abscess because in the existing conditions it was anatomically impossible for the prostate to escape involvement. The patient is still at the Municipal Hospital and, although improved generally, still complains of some pain in voiding, pain in his perineum and occasional difficult urination.

### BERGEN COUNTY

Charles Littwin, M.D., Reporter

The regular meeting of the Bergen County Medical Society was held at the Hackensack Hospital January 13, with Dr. E. W. Clarke in the chair. Report of the Executive Committee was read by Dr. Snedecor. On December 30, Drs. Clarke, Sarla, Littwin, Vroom, Payne, James and Snedecor met at the home of Dr. Vroom, in Upper Saddle River. The annual report of the Treasurer was read by Dr. Sarla, showing a balance on hand, Jan. 1, 1931, of \$2974.73.

The application of Dr. Lyman Burnham, of Tenafly, for transfer from Kings County Medical Society, was approved.

Dr. Morrow reported, as chairman of the Public Relations Committee, the recommendation that the Secretary should write to the State Board of Medical Examiners requesting an investigation of

Dr. D. F. Haagen, of Hackensack. This was approved.

Dr. Payne brought up for discussion Senate Bill 304, proposed by the Abell Commission, to recognize the licensing of all the professions. The consensus of opinion is that this would be of real detriment to the medical profession. The secretary was asked to explain the provisions of the bill clearly in the next issue of the Bulletin.

The committee then discussed the expense of secretarial work, which has been mounting steadily since publication of the Bulletin and increase in activities of the society. It was recommended that the society vote Dr. Snedecor \$50 to cover incidental expenses of the past 2 years and that the society appropriate annually, the sum of \$100 for expenses of the secretary's office.

Dr. McGilvery withdrew his application for membership, because he is leaving Bergen County.

Dr. Payne stated that the Ridgewood Medical Society felt that its members would have more interest in the Bergen County Society, in which only a few are members, if more of the meetings were held nearer Ridgewood.

An informal discussion on committee appointments for the coming year was held. If any of the members desire to do active work on any committee, the incoming officers will probably be only too glad to appoint them.

Election of officers was then held, with the following results: President, Joseph R. Morrow; Vice-President, Walter Schmidt; Secretary, Spencer T. Snedecor; Treasurer, Michael Sarla; Reporter, Charles Littwin; Delegate State Nominating Committee, A. Liva; Delegates for 3 years, Joseph Payne, Herman Trossbach and Spencer T. Snedecor; Alternates, Conde de S. Pallen, Harrison B. Wilson and Joseph Van Dyke.

With a very witty speech, Dr. Clarke handed over the President's gavel to Dr. Morrow and the latter received it with a bit of very sincere oratory.

The scientific part of the meeting was then taken over by Dr. Littwin who had prepared a "Symposium on Sinus Disease", as follows:

"Anatomy and Physiology of the Sinuses", Dr. Simon L. Ruskin, Post-Graduate Hospital, New York City.

"Sinusitis in Children", Dr. William Greenfield, Hackensack.

"Surgical Treatment of Sinusitis", Dr. George Worcester, Englewood.

"Conservative Treatment of Sinusitis", Dr. Charles Littwin, Palisade.

After some general discussion the meeting was adjourned at 11:30 p. m.

### CAMDEN COUNTY

R. S. Gamon, M.D., Reporter

The January meeting of the Camden County Medical Society was held Tuesday, January 6, at 9.30 p. m., Dr. W. J. Barrett, the new President, presiding for the first time.

The Scientific Program consisted of a paper read by Dr. Wesley Jack on "Diagnosis and Treatment of Fractures of the Skull", and discussion was opened by Dr. A. S. Ross. The second scientific paper was read by Dr. Vincent Del Duca upon "Management of the New-Born". This paper was discussed by Drs. E. G. Hummel and A. B. Davis.

The Committee on the Post-Graduate Extension Work, Rutgers University, reported that Camden County is to combine with Gloucester and Burlington Counties in subscribing to a series of 8



lectures; 4 to be on Gastro-Intestinal Diseases and 4 on Cardio-Renal Conditions.

The society referred to the State Society Welfare Committee a suggestion from one of the local newspapers concerning paid educational advertisements which were to be run in series.

The February meeting will be the annual Case Report Night, which was one of the most popular and well attended of all meetings last year.

Drs. Samuel C. Rosen, of 109 S. 27th Street, Camden, and Harold P. Coxson, of Laurel Road, Stratford, were elected to membership.

There were 61 members in attendance.

### CUMBERLAND COUNTY

E. S. Corson, M.D., Reporter

Dr. Reba Lloyd, of Bridgeton, presided at the meeting of the Cumberland County Medical Society January 13, at the Weatherby House, Millville, being the second woman physician to fill the office of President of the organization, so far as is known. Dr. Lloyd, who was elected Vice-President at the annual meeting, succeeded to the presidency upon the death of Dr. Cornelius S. Franckle, late of Millville. The first woman physician to fill the office of president was Dr. Mary Dunlap, at that time residing in Vineland. This was approximately a quarter of a century ago.

The following members were elected: Drs. Charles Cunningham, Vineland; G. A. Davies, Elmer; Charles B. Neal, Millville; H. Burton Walker, Vineland; F. Vernon Ware, Millville. Dr. Frank Sheppard, of Millville, was elected Vice-President.

Dr. W. Hersey Thomas, of Temple University, discussed the subject of Intravenous Urography. Previously, in order to obtain an x-ray picture of the urinary tract, it was necessary to introduce an instrument into the urinary bladder and illuminate it, by which means the mouths of the ureters were found and a tube introduced, through which a stain was forced into the kidney, making it impermeable to x-rays, and thereby outlining the anatomy and any foreign body therein. Recently a new method has been devised, whereby the stain is introduced into a vein and in a few minutes the entire urinary tract may be outlined. This method obviates the inconvenience and discomfort of instrumentation and its attendant risks. Many x-ray pictures were shown illustrating both methods and the comparative results.

Dr. John O. Bower, of Temple University, discussed "The Management of Toxic Goiter". There are several forms of goiter which affect the health, each form representing different stages and changes of the diseased condition. There are 3 methods of treatment, operative, x-ray and radium. Selection depends upon the character and progress of the disease in its effect upon the patient. A basal metabolism test should be taken to determine the degree of oxygen expended to maintain chemical changes in the body. Children as young as 1 year were shown as being affected, and good results were obtained by transplanting parts of goiter from another person. Medical treatment affords but little permanent good.

### ESSEX COUNTY

E. LeRoy Wood, MD., Reporter

A meeting of the Essex County Medical Society was held in Newark at the Academy of Medicine Thursday evening, January 8, with Dr. Henry C.

Barkhorn, the President, in the chair. About 100 members attended.

"Will Vocational Training of Pupil Nurses Help the Physician?" was the title of an address by Dr. Edgar A. Ill, who is a member of the Newark Board of Education, in which he advocated a plan of providing vocational training in primary subjects to relieve hospitals of the burden of so much time devoted by pupil nurses to class-room lectures. On motion it was voted to approve Dr. Ill's suggestions, and to direct the attention of hospital and training school authorities to serious consideration of the subject. Discussion was participated in by Drs. Hagerty, Polevski, Haussling, Bingham, Stahl, and Buermann.

"The Doctor and the County Health Movement" was the title of an address by Mr. Wm. J. Orchard, President of the Essex County Health Council, and also of the Chamber of Commerce of the Oranges and Maplewood. He outlined the plans of this Council in coordinating the health activities, preventive and curative, of all the hospitals, clinics, charities, medical organizations and governments in the 22 municipalities in this county; a comprehensive outlook taking probably 5 years to accomplish, and having in view reduction of costs and increase in efficiency of county health work. Discussion with questions and answers followed. Drs. E. J. Ill, Rubinow, Bradshaw, Polevski, Pinneo, Bingham, Jackson and Rev. Mr. Martin, Superintendent of St. Barnabas Hospital, took part. A rising vote of thanks to Dr. Ill and Mr. Orchard was passed.

Dr. Barkhorn entertained the speakers and the society officers at dinner before the meeting.

### Eye, Ear, Nose and Throat Section Academy of Medicine of Northern New Jersey

E. LeRoy Wood, M.D., Secretary

The regular monthly meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey was held on Monday evening, December 8. The paper of the evening was read by Dr. H. B. Orton, of Newark, describing several cases of mediastinal infection secondary to foreign bodies in the air or food passages. With the aid of lantern slides and diagrams he fully described this serious condition, the anatomy of the region, and the pathways of infection. He then discussed the surgical approach and the general management, from the standpoint of the bronchoscopist and the thoracic surgeon.

In discussion, Dr. Dieffenbach, who had cooperated in treatment of one of the patients who recovered, pointed out that posterior mediastinotomy is not so formidable and shocking as it seems.

Dr. Wallace Pyle, of Jersey City, presented a case of "Bilateral Progressive Blindness", first in one eye and then in the other, following a series of head injuries.

The meeting adjourned at 10.15 p. m. Forty-two were present.

### GLOUCESTER COUNTY

Henry B. Diverty, M.D., Reporter

The epidemic of grippe and colds held down attendance at the monthly meeting of the Gloucester County Medical Society at the Hotel Pitman

January 15. Those attending from this county included Dr. I. W. Knight, the President; Drs. M. F. Lummis, Pitman; Charles Pedrick, Glassboro; A. B. Black, Mickleton; C. F. Fisler, Clayton; S. F. Ashcraft, Mullica Hill; Ralph Hollinshead, Westville; Duncan Campbell, Woodbury; George N. J. Sommer, President of the State Medical Society; Howard F. Palm and Emma Richardson, of Camden County; Carroll Rogers, of Swedesboro.

The essayist, Arthur D. Goldhaft, V. M. D., of Vineland, chose as his subject, "Diseases Common to Man and Animals", which was greatly enjoyed by those attending.

A fine dinner was served by the Hotel Pitman managers.

### HUDSON COUNTY

E. G. Waters, M.D., Reporter

The regular meeting of the Hudson County Medical Society was held at the Carteret Club January 6, with the President, Dr. J. M. Cassidy, presiding.

The president announced that the Annual Dinner is to be held on the first Saturday after Easter, at the Carteret Club, Jersey City.

The Publicity Committee reported that several conferences had accomplished nothing as yet. A verbal resignation of the chairman of this committee was offered by the Secretary.

Dr. Wm. N. Barbarito, reporting for his committee, stated that the new constitution would be ready for consideration at the February meeting.

Post-Graduate Committee. Dr. Louis Lange reported progress and stated that plans are under way for several courses.

The resignation of Dr. Earle Creveling was accepted with regret.

The following new applications were received and referred to the Board of Censors:

Drs. Wm. C. Schuchner, 264 First Street, Jersey City; Morris Green, 476 Palisade Avenue, Weehawken; Benjamin Leavitt, 111 Garrison Avenue, Jersey City; Perry O. Hall, 131 Kensington Avenue, Jersey City.

Dr. G. N. J. Sommers, President of the State Society, made a few remarks touching upon the legislative activities of the State Society, concerning which he stated that the bill providing for a consolidation of all the State Boards would not be passed. He also stressed the value of the Woman's Auxiliary, stating that the influence of a strong auxiliary was valuable to the society and requesting the members to support it.

The speaker of the evening was Dr. John Wyckoff and the subject "Digitalis". Dr. Wyckoff began by enumerating the many variable factors in the giving of digitalis which affect the therapeutic results—(1) The active principles may vary. (2) The percent-ratio of the constituents vary. (3) Absorbability of the principles varies. (4) Elimination of the principles varies. (5) Elimination-rate of the different leaves varies. (6) The preparations used vary. (7) The method of administration varies, e.g., mouth, rectal, subcutaneously and intravenously. (8) The various cardiac functions affected by the drug vary in their response. The drug acts differently in flutter, in fibrillation. Thus, it is well seen that these numerous variables may explain all the difficulties in the use of the drug and the results obtained.

A brief history was then given of the discovery

of digitalis from the foxglove which Witherington found in the old lady's formula, and the conclusions of Witherington on the conditions, and amount of the drug to be used; his 10 years' observation, published in pamphlet form, as well as the fact that they were subsequently neglected by the profession, leading to misuse, abuse and disease.

In order to know the correct manner of using a drug there are 4 factors which must be determined: pharmacologic action to be expected; safe and adequate dose; rate of absorption; rate of elimination. Witherington thought that the action of digitalis was mainly on the kidneys. Schneideberg, and later Cushny, found its action to be on the heart. There is much that we still do not know about the drug but there are also a few things that we do definitely know. We know that it (1) slows the sinus rhythm; (2) acts on the auricular musculature and therefore can alter the circus movement in the auricle; (3) acts on the A-V bundle and inhibits impulse passage, slowing conduction to the ventricle; and (4) acts on the ventricle, increasing its contractile power.

Dr. Eggleston, in 1914, attempted to standardize the dosage of digitalis necessary to produce therapeutic results, reporting on some 50 patients. He attempted to correlate all available data, as to age, sex, lesion, and bulk, but found that the only near-constant ratio existed between the weight of the edema-free patient and the amount of digitalis used. This he fixed at 0.15 cat units, per pound of body weight. His studies were corroborated by both Robinson and Henry Christian.

A description of the attempts to study elimination of the drug, by Eggleston and Wyckoff, was then given. Absorption of the drug was found to begin 15 minutes after oral ingestion and to be complete in 6-8 hours. Pardee's experiments on elimination were cited, in which it was found that the fully digitalized patient eliminated about 20 minims of the tincture per day.

Dr. Wyckoff then showed a large number of lantern slides graphically depicting use of digitalis in the various cardiopathies. He stressed the importance of not conflicting the periods of digitalization and maintenance.

The safest way to give digitalis is rapidly, with diminishing fractional doses. Most patients need about 20 gr. to produce the desired results. Maintenance can be determined only by the therapeutic test, which is a sufficient amount to maintain a ventricular rate of 72-90 with the patient at rest for 10 minutes.

The best preparation to use is capsules of the powdered leaf, but this is quite expensive. Tablets are the next best, and tincture the poorest. The belief that digitalis preparations deteriorate rapidly is erroneous, but preparations must be standardized, for most of them vary greatly from required strengths.

The best way to take the drug is by mouth. If not tolerated, it is then best given by rectum, as suppositories, 3 gr. being a maintenance dose. To give the drug intravenously is seldom necessary. Given so, ouabain is best, 0.1 mgm. dose, up to 10 doses.

### Bayonne Hospital Clinical Conference

Maurice Shapiro, M.D., Secretary

The regular meeting of the Clinical Conference of Bayonne Hospital Staff was held Monday evening, January 5, under the presidency of Dr. Donohoe.



*Dr. Sklar* reported cases from Medical Service of *Dr. Deary*.

*Case 1.* J. G., aged 46, male, was admitted December 5 with the chief complaints of cough, loss of weight, hoarseness and night sweats. Patient, a sand blaster, gave the history of a cough, productive of a thin, watery hemorrhagic sputum for the past 8 months, associated with loss of 20 lb. weight, extreme weakness and night sweats.

Lung percussion resonance was slightly diminished throughout both lungs. Breath sounds were also proportionately diminished in intensity, especially at the bases; sibilant râles were heard at both bases, but no moist post-tussive râles could be elicited. On percussion, the heart sounds were regular, rhythmic and of good quality. The rate was normal. Pressure 124/70. Blood picture normal except for very slight secondary anemia. Sputum negative for tubercule bacillus.

Radiography showed generalized, parenchymatous infiltration of both lungs. In the hilus a fairly large sized area of calcification, probably due to an old calcified gland. Tracheal shadow deviated to the right. Between the upper and middle lobes, right side, evidence of an old interlobar pleurisy.

This was diagnosed as a case of pneumoconiosis, silicosis variety, due to steel and iron dust. With rest in bed and the usual expectorants improved slightly and was allowed to go home.

*Case 2.* E. S., male, aged 20 years, white, was admitted November 24 with chief complaint of swelling of right ankle. History of a gradual painful swelling over a period of 4 weeks, becoming so bad that he was forced to bed. No other joints involved. No history of trauma or rheumatic fever. Denied gonorrheal infection.

Examination revealed no positive finding besides several carious teeth and a swollen, reddened right ankle joint that was very painful on motion and tender to touch.

Urine negative except for faint traces of albumin. Blood count, slight secondary anemia; W. B. C. 12,000; 80% polys. Wassermann negative. Prosthetic smear showed many intracellular lipococci. X-ray examination of foot indicated the presence of an osteo-arthritis of the fourth metatarsophalangeal articulation.

Upon a diagnosis of gonorrheal arthritis, the foot was immobilized and vaccine injections were instituted. In 24 hours after first injection he developed an acute congestive conjunctivitis, from which we found some Gram-positive diplococci and a few Gram-negative bacilli. This conjunctivitis was at first thought to be a specific reaction to vaccine, but on later observation patient was found to have an infective origin.

The foot responded slowly but surely to treatment so that presently he was up and about the ward. The conjunctivitis also responded well to cold compresses, argyrol and atropin.

*Case 3.* J. C., male, white, aged 43, fireman in chemical works, was admitted complaining of weakness and increasing pallor. For 2 months he had noticed a progressive paling of his skin associated with weakness, pain in chest, some cough and dark expectoration. No hemoptysis, numbness or tingling in hands or feet. He also noticed that he was dyspneic upon mild exertion and that his ankles had become swollen 2 weeks before admission. Lungs negative except for occasional râles at both bases. Slightly enlarged heart; regu-

lar sound of good quality; hemic murmur, systolic in time at apex.

Blood picture was that of a severe secondary anemia. Wassermann and Kahn tests negative.

Consultation with genito-urinary department revealed the following: Left kidney diminished function; right kidney no function. Pyelogram showed congenital kidney anomaly, probably a horse-shoe kidney and a right hydropyonephrosis. The pelvis were drained several times, with some symptomatic and subjective relief, but his anemia improved very slightly. Impression, severe secondary anemia on basis of urologic lesion mentioned.

*Dr. Madras* reported from the Surgical Service of *Dr. Donohoe*.

*Case 1.* S. J., aged 44, admitted with a history of acute abdominal pain of 20 hr. duration, following ingestion of heavy meals during the Christmas holidays. For about 3 years complained of occasional epigastric distress, with belching of gas and sour eructations, and chronic constipation. There was no nausea or vomiting. Had never consulted a doctor for this condition. On admission, in shock; pulse 140; temp. 104°; nausea and vomiting. Generalized tenderness, most marked in epigastrium with marked distention.

Perforated gastric or duodenal ulcer was diagnosed and immediate laparotomy advised.

Abdomen was filled with a tremendous quantity of fluid, together with a mass of undigested food. This was sucked out as rapidly as possible, the fluid being deeper in color near the pyloric region, where the structures were bound down, and because of mordant condition further exploration was inadvisable. Drains were inserted and abdomen closed rapidly with through and through silk worm sutures. Patient was given stimulants, hypodermoclysis of 1000 c.c. warm glucose and saline, but he expired 10 hours after operation.

*Case 2.* J. M., aged 13 years, male, admitted because of pain in lower abdomen; onset 1 day previously, pain being centered around umbilicus and accompanied by nausea and vomiting. Vomiting continued and pain finally became localized in right lower quadrant. Diagnosis of appendicitis was made and immediate operation advised.

The appendix was markedly swollen in distal third; vessels congested; serosa covered with fibrin; and the tip, adherent to the mesentery, was packed with fecal material. Postoperative course was turbulent, and on sixth day wound was inspected and probed in lower angle, and about 100 c.c. of pus evacuated. On seventh day occasional vomiting, wound broken down, draining, but no relief from ileus. An opening was made into abdomen with a Kelly clamp and 5 oz. of an opaque, yellow fluid was removed; culture from which showed Gram-positive cocci and *Staphylococcus aureus*. On ninth day patient vomited fecal matter and distention showed no signs of decreasing; temperature 103°, pulse 140. The old incision was lengthened and the rectus retracted medially. The cecum was found distended and there was a partial volvulus caused by adhesion of a loop of small intestine to the lower portion of the cecum. The child's condition became desperate—almost pulseless—so the adhesions were separated and a rapid cecostomy performed. Stimulants were given and saline intravenously. Following day there was a remarkable change for the better, and the wound was draining large amount of fecal matter. Abund-

ance of fluids was forced by mouth. Six days following the tube was removed but cecum was draining profusely. Seventeen days following operation patient had a bowel movement but the fistula drained profusely. Wound began to heal, fistula becoming smaller and gradually closed. Child was extremely emaciated—appetite became voracious. Discharged 2 months after admission, and his condition has remained excellent.

*Dr. Autopol* reported upon a patient, male, aged 45 years, admitted to the hospital with a chronic cough of 2 years' duration, and loss of considerable weight. Two weeks before admission had coughed up a copious amount of foul smelling sputum and complained of pain in the right chest. On admission a right thoracentesis was performed and the chest found to contain a considerable amount of purulent material, which on smear and culture showed Gram-positive diplococci and streptococci. The material coughed up by the patient contained the same organisms and was similar in nature to that of the chest fluid. The patient died 4 days after admission, and autopsy disclosed a massive purulent effusion, 1000 c.c., in the right chest; pleura markedly thickened; in the right lower lobe main bronchus a marked infiltration of the entire wall causing a bronchostenosis at this point; dilation of all the bronchi of the right lower lobe, with purulent material similar to that found in the pleura. On microscopic examination the diagnosis of metaplastic bronchus carcinoma of the right lower lobe, with extension into the peribronchial areas and metastases to the tracheobronchial lymph-nodes was confirmed. The cells appeared to be of the squamous variety, in places showing a tendency to pearl formation. The origin was thought to be from metaplastic columnar epithelium of the bronchus lining.

#### Clinical Society of North Hudson Hospital

J. Africano, M.D., Reporter

The regular monthly meeting of the Clinical Society was held Tuesday, January 13, with Dr. Louis C. Lange acting as chairman; 44 members and guests were present.

*Dr. Tannert* read the hospital report for December: 250 admissions and 284 discharges; 21 deaths, of which 12 were medical, 3 surgical, 2 pediatric, 2 gynecologic, 1 urologic and 1 newborn; 7 autopsies were performed, or 33% of all deaths; clinic cases 415, emergency cases 419, ambulance calls 93; there was a tremendous amount of work done by the laboratory—1989 miscellaneous examinations.

*Dr. W. Braunstein* discussed 6 of the autopsies, the report of the seventh being withheld pending a court trial. One death resulted from peritonitis and septicemia following self-induced abortion; a patient who had successfully induced 9 abortions but following the tenth developed trouble.

*Dr. M. Green:* Unusual Case of Bronchopneumonia. R. S., male, aged 31, colored, admitted December 1 complaining of cough, frontal headache and hemoptysis. Past history: frequent sore throats during childhood; diphtheria at 13; chancre (?) at 17; pneumonia 1 yr. ago and confined in the Jersey City Hospital for 3 weeks, since when he has noticed a steady loss in weight amounting to about 30 lb.

Three days before admission he had a severe chill, became very weak, with marked vertigo, and had to go to bed; developed severe cough and frontal headache, and coughed up some bright red blood.

Bronchovesicular breath sounds and increased vocal fremitus heard anteriorly over both sides of chest; dullness and amphoric type of breathing found over the left lower lobe; friction rub heard below angle of the left scapula; fine, moist râles audible over both apices, while coarse râles could be heard at both bases. Heart sounds of poor quality. Abdomen slightly distended. Blood pressure 118/68; temp., 106°; pulse, 112; resp., 40.

The outstanding features during his 4 days in the hospital were the profound toxemia and delirium, with aggravation of symptoms; temperature ran as high as 106°; icteric tint of the sclera; pneumonia signs spread over wider area in both lungs; because of the mental state, no oral medication or nourishment could be given.

The clinical diagnosis was pulmonary tuberculosis with a terminal bronchopneumonia. Autopsy disclosed moderate amount of clear pericardial fluid; no free fluid in the pleural cavities; left lung adherent to the parietal wall and diaphragm, and showed beginning gangrene at the base; right lower lobe consolidated.

The chronic cough, loss in weight, hemoptysis, anorexia and color of the patient certainly warranted diagnosis of pulmonary tuberculosis, but no evidence of such lesion could be found at autopsy. The other interesting feature in this case was the overwhelming toxemia which persisted for 4 days.

*Dr. Terk:* Recurrent Lobar Pneumonia. S. R., male, aged 24, pipe fitter, admitted with history of an occasional non-productive cough and 3 previous attacks of right-sided pneumonia.

From the anterior axillary line going posteriorly, including axillary area to about midway in the right interseapular region, there was a definite dullness, bronchovesicular breathing, increased vocal and tactile fremitus, with scattered crepitant râles.

Roentgenogram showed: "Obiteration of the entire right chest. No fluid level. Left chest and heart normal." Examination indicated effusion in the lower right chest. An attempt to aspirate was made, but we obtained only a few drops of frothy blood, and the needle was immediately withdrawn; patient then began coughing up considerable blood. Blood pressure 110/60; temperature rose to 102°, and pulse to 100. Condition remained about the same for 1 week and then showed improvement. At end of 3 weeks radiograph showed islands of infiltration reported as sequels of pneumonia. Examination at this time showed the lungs clear except for slight impairment of breath sounds and a few crepitant râles in the lower right base. Discharged 4 days later as cured.

*Dr. Justin* said that although aspiration was negative, fluid was undoubtedly present as shown by the physical signs and x-ray plates; the needle punctured the lung and the patient promptly coughed up some blood; the fluid was absorbed rapidly and completely; reappearance of fluid made it suspicious of a tuberculous origin, though sputum examinations were consistently negative.

*Dr. Pearlstein* emphasized that pneumonia produces no immunity, but on the contrary, increasing susceptibility; some patients are peculiarly susceptible to the pneumococcus.



*Dr. Arthur Justin.* Bronchopneumonia a Post-operative Complication. J. R., male, aged 56, married, laborer; admitted with past history negative except for excessive alcohol consumption, and present history of cough for 2 years, productive of yellow phlegm, recently lessened since he reduced his smoking. Illness began with dull pain 1 in. below the umbilicus and shifted to the right abdomen. This distress continued, with pain worse 1½ hr. after eating, and on deep breathing. Temperature, 102°; pulse 90; resp., 20. B. P. 170/84. Systolic murmur at apex. Coarse moist râles over entire anterior chest and posteriorly over the apices and interscapular regions. Abdomen showed moderate rigidity over the right side from costal margin to iliac crest. Tenderness 2 in. below right costal margin.

Blood count: W. B. C., 8200; polys., 80%; Hb., 80%; R.B.C., 5,000,000. Tentative diagnosis: Acute appendicitis; acute cholecystitis; pulmonary tuberculosis. On the day following admission, he was operated upon under ether anesthesia, with findings of a thickened gall-bladder, many adhesions, no stones, appendix twisted and fibrotic with many adhesions.

His first week was a stormy one; developed severe delirium tremens and required restraint. Surgical progress was reported as satisfactory, but we noted an acutely ill man, moderately delirious, dyspneic, cyanotic and presenting signs of bronchopneumonia with areas of consolidation in the left upper, left lower, and right lower lobes. Sputum showed pneumococcus Type IV; negative for tubercle bacillus.

After 4 days, improvement began and radiograph indicated generalized tuberculosis of both lungs. A left pleural to-and-fro rub was felt and heard; 1 oz. blood tinged, turbid, yellowish fluid was removed from the base of the left chest, and smear showed round cells with very few polys. During this period of 1 month there was a diminished expansion of the left chest, dullness in the left axilla, both bases showed harsh breath sounds, râles above and below both clavicles anteriorly and posteriorly and over both lower lobes.

Repeated radiographs showed the same original findings although the bronchopneumonia areas were greatly diminished in size. The patient was seen by Dr. Spalding, who reported bronchopneumonia and chronic fibroid phthisis.

The ease is presented to emphasize the importance of a careful examination of the chest of all patients who are to have an ether anesthesia; and the prolonged duration of findings which must be regarded as chronic bronchopneumonia, in the absence of finding tubercle bacilli, although clinically the history would indicate an activation of tuberculosis of the lungs.

*Dr. Lange:* Empyema a Postoperative Complication. N. M., male, aged 38, admitted with history of having been shot in the abdomen 1 hour previously.

Immediately brought to the operating room where 8 perforations of the jejunum and 4 of the mesentery were closed. He reacted fairly well from operation and was doing well until the fourth day postoperative, when he had a chill and temperature rose to 103.2°. Tissue about the wound of exit, about ¾ in., was gangrenous and emphysematous on palpation. Diagnosis of gas-bacillus infection was made and he was given gas-gangrene polyvalent antitoxin on 3 days following. On the fourth day postoperative, examination of the chest

showed tubular to bronchial breathing in the lateral aspect of right lower lobe, as well as posteriorly. Slight impaired resonance on percussion over same area. Radiograph on seventh day postoperative revealed a pneumonic process in the right lower lobe. Physical signs remained the same until tenth day, when flatness on percussion was elicited in the right lower chest, with distant to absent breath sounds. A diagnosis of fluid in the right chest was made. Thoracentesis was done at this time and 8 oz. blood-tinged serous fluid was withdrawn—there was no evidence of any purulent material.

The physical signs in the right chest have remained the same up to the present time—no change after repeated thoracenteses.

*Dr. Schwarzwald:* Empyema a Postoperative Complication. G. W., female, aged 17, admitted with chief complaint of pain in right lower quadrant of abdomen. Two years ago, patient suddenly had a severe pain in the right lower quadrant, which was intermittent, dull and cramplike in character. Pain lasted 1 day and then disappeared. In May 1930 she had a severe attack, and was told she had appendicitis. Examination negative except for some tenderness in right lower quadrant, about 1 in. medial and 1 in. above the anterior superior spine; also some tenderness to right of the umbilicus. No rebound tenderness, no rigidity, no masses palpable. A few râles, heard anteriorly, disappeared on coughing.

Appendectomy was performed December 5. The findings were a mobile dilated cecum, about 1 oz. serous fluid in the abdomen and a subacutely inflamed appendix. The first day postoperative, temperature rose to 102°, pulse 110, respirations 26 and patient was coughing and expectorating mucus streaked with bright red blood. The second day she complained of slight pain in the chest, and examination showed bronchial breathing at the left base. Diagnosis: Postoperative pneumonia.

She developed an extensive pleural exudate, and it was decided to tap the chest to determine nature of the fluid. Thoracentesis was done and about 16 oz. of a pea-green purulent fluid was removed from the left chest.

X-ray picture taken the next day showed heart pushed to right; obliteration of lower left lobe with pneumothorax upper left; collapsed lung with fluid level; hydropneumothorax.

Because this was a streptococcus empyema, it was decided to wait several days before operating.

Rib resection was performed, releasing about 2½ quarts of a bright, yellowish-green, purulent material, containing thick, coagulated, fibrinous clots. The pleura and the pericardium were covered by a thick, coagulated fibrinous material. Closed method of drainage was employed by suturing the operative wound tight about the tube, and tubes attached for irrigation with Dakin's solution. Postoperative course uneventful. Discharge rapidly cleared. Radiograph now shows the left chest to be clear except for a slight amount of fluid at the costophrenic angle. The left lung is expanding.

*Dr. Roberts:* Case of Postoperative Pulmonary Embolism. A well-developed and well-nourished woman of 36 suffering from fibroid tumor of the uterus. Uneventful convalescence after hysterectomy except that she had a slight rise in temperature on the eighth day, which apparently was due to a dry pleurisy. There was no suspicion of a lung infarct. Heat, strapping and the administration of 10 gr. acetylsalicylic acid relieved the dis-

comfort. Suddenly, on the night of the tenth day postoperative, the patient was seized with severe pain in the chest, was markedly dyspneic and cyanotic, and died in about 2 minutes despite all remedial measures.

I thought it might be of interest to scan the records of the hospital for similar cases in the past 2 years. In that time we have had 6 deaths from postoperative pulmonary embolism, ranging in time from 2 to 42 days. Two followed hysterectomies, while the remaining 4 followed extensive abdominal work, such as colostomy, release of postoperative adhesions, jejunostomy, and drainage of an extensive peritonitis. The age incidence was 38 to 63. In all cases there was no warning whatsoever; 3 patients had been up and about for several days, while the other 3 were still confined to bed.

### HUNTERDON COUNTY

Barclay S. Fuhrmann, M.D., Reporter

The regular quarterly meeting of the Hunterdon County Medical Society was held at Frenchtown, January 20, at 11 a. m. Present: Drs. Gramsch, Slavin, Decker, Closson, M. H. Harmon, B. M. Harmon, Salmon, McCorkle, Tompkins, Sommer and Fuhrmann.

The meeting was called to order by Dr. W. E. McCorkle, Second Vice-President. After reading the minutes, which were approved as corrected, and correspondence which was ordered filed, the censors having approved the application of Dr. F. O. Slavin he was unanimously elected to membership.

The subject of Councillor District Meetings was presented by the secretary, quoting from the report of The Conference of Secretaries and Reporters as found in the December Journal, and after some discussion it was decided that the subject be held in abeyance for further consideration at a future meeting.

The program for the April meeting in Flemington is to be devoted to the subject of "Potter's Version", and Dr. E. F. Purcell is to be invited to be present and show his pictures on that subject.

Dr. McCorkle extended greetings to our new member, Dr. Slavin, after which the meeting adjourned, dinner was served, and then our usual round-table discussion ensued.

### MERCER COUNTY

A. Dunbar Hutchinson, M.D., Secretary

The Mercer County Medical Society met in the Carteret Club, January 14, Vice-President William L. Wilbur presiding in the absence of President Swern who was ill. The minutes of the preceding meeting were read and approved.

Dr. John A. Kolmer delivered a very interesting address on "The Nature of Bacteriophage and Its Practical Application in Treatment". Dr. Kolmer reviewed the early study of agar plate cultures in 1918, with a synopsis of results obtained by Dr. Durrell and others. The culture, development, reactions and manner of application, with resulting effects upon involved tissues, were most entertainingly and instructively defined.

Dr. Kolmer very kindly answered many ques-

tions propounded during the interesting discussion which followed.

Dr. L. Samuel Sica presented a copy of recommendations drawn by the Committee on the Bureau of Compensation, as follows:

"It is suggested by the Mercer County Compensated Medical Society that in formal hearings held by the Compensation Bureau a physician should be designated by the Commissioner of Labor, who shall receive a salary from the Department of Labor, and shall recommend to the referee holding such informal hearings (upon request of such referee) the extent of temporary and permanent disability of persons applying to the bureau for compensation; to be made after proper examination. This physician shall not, in any compensation case, whether heard informally or formally, before a referee or deputy commissioner, give testimony on behalf of either the petitioner or respondent, but such physician may, under regulation of the Commissioner of Labor, give testimony at formal hearings in cases where he has previously examined the petitioner on behalf of the state, with the restriction that he shall not be employed by either the petitioner or the respondent to give expert testimony in their behalf, but such testimony shall be given only to assist the referee or deputy commissioner in arriving at a decision.

Such physician shall not, while he is employed by the Department of Labor in such capacity, be in the employ of any insurance carrier or self-insurer handling compensation cases."

Dr. Peter J. Warter was elected an active member. Drs. Harry R. Aronis, Herman Cohen, Morton Reese-Cohen, and Thomas V. Murto were elected associate members.

### MIDDLESEX COUNTY

S. G. Berkow, M.D., Reporter

Regular meeting of the Middlesex County Medical Society was held January 21 at the Perth Amboy City Hospital, Dr. Wm. J. McCormick presiding. Attendance, 27.

The regular order of business was dispensed with to enable Prof. Bryans, of Rutgers University, to address the members on post-graduate courses offered this year by the State Medical Society in co-operation with the University. Suggestions by several of the members were noted by the speaker for consideration by his committee.

The scheduled address was given by Dr. H. H. Ritter, Associate Professor of Traumatic Surgery, Post-Graduate Hospital, New York, on "Some Interesting Phases of Traumatic Surgery". The speaker gave a practical outline of the treatment of burns and other wounds and showed pictures of the blanket treatment of separation of the symphysis pubis. He then exhibited lantern slides of 2 rare cases, one an anterior dislocation at the knee joint, and the other a midtarsal dislocation.

Active discussion attested the interest of the members.

At the suggestion of the Chair, a short discussion was held on the advisability of changing the meeting time from afternoon to evening. Without formal motion and vote, the members declared in favor of holding the next meeting at 9 p. m.



**Medical Section Rutgers Club**

J. H. Rowland, M.D., Secretary

The regular monthly meeting of the Medical Section of the Rutgers Club was held at the Elks' Club, New Brunswick, on Friday evening, January 16, Dr. William Klein presiding. There were 35 members, friends and guests present.

There being no business to transact, the speaker of the evening was immediately introduced. Dr. Myron Sulzberger, Associate Professor of the Post-Graduate Hospital, New York, gave a very instructive talk on "The Association of Industry and Skin Diseases". His talk was very complete, and considered principally the frequency and the economic aspect of industrial skin diseases. He stressed the importance of differential diagnosis, especially where it concerned compensation; emphasized the importance of diagnosis, establishment of cause by means of the patch testing method, and treatment, which concerned principally removal of cause, if possible, desensitization, and symptomatic treatment. Lecture was illustrated by lantern slides.

Following the lecture, members adjourned to the dining room where entertainment was provided by the hosts of the evening, Drs. Hoffman, Howley, Johnson and Karshmer.

**MORRIS COUNTY**

Marcus A. Curry, M.D., Reporter

A special meeting of the Morris County Medical Society was held the evening of January 22 at the New Jersey State Hospital at Greystone Park.

Vice-President Krauss, in the absence of President Sutphen, who is convalescing from a severe cold, presided over an attendance of approximately 60 members and guests.

Routine business included the reading by Secretary Ward of minutes of the special meeting of December 18, 1930, and the proceedings of a meeting of the Executive Committee; the latter embracing plans under way for a Post-Graduate Course of Lectures. Dr. Frost, of the committee that is working out the plan with Rutgers University, reported the tentative arrangements for the courses; indicating that they will be given at Morristown Memorial and All Souls', in Morristown, and the Dover General; and stating that within a few days each member will receive a letter outlining the plan.

Vice-President Krauss announced that Dr. Ross, of New York, will speak on "State Medicine" at the Academy of Medicine in Newark at 8:45 the evening of February 12; this being a meeting of the First Councillor District of the state.

Two new members were unanimously elected: Drs. George Mitchell, of Hackettstown, and J. H. Harrington, of Rockaway.

The scientific chapter of the evening was given over to very interesting moving pictures, the films for which were obtained from the Eastman Kodak Company; the subjects covered being "Infections of the Hand", "Normal Brech Presentation" and "Tests of Vestibular Function". The pictures were well and clearly projected, attentively witnessed and proved to be very interesting.

The evening was rounded out with a social ses-

sion during which, at the invitation of Medical Superintendent Doctor Curry, refreshments were enjoyed.

**PASSAIC COUNTY**

W. W. Hall, M.D., Reporter

The regular meeting of the Passaic County Medical Society was held at the Valley View Sanatorium, Paterson, on January 8, at 9 p. m., with 78 members present.

Dr. Wm. P. Healy, attending Gynecologist to the Memorial Hospital, New York, presented a most interesting paper on "Pelvic Neoplasms, with Special Reference to Carcinoma".

Two applications for membership were presented to the Board of Censors: Drs. Fritz Plinke, 99 Gregory Avenue, Passaic; and Nicholas Palma, 281 Broadway, Paterson.

A collation was served by the institution.

**UNION COUNTY**

Russell A. Shirrefs, M.D., Reporter

The regular quarterly meeting was held at the Elizabeth General Hospital on the evening of January 14, with Vice-President H. V. Hubbard presiding. The essayist was Dr. Arthur R. Cassili, of Elizabeth, who spoke on "The Third Circulation (Cerebro-Spinal Fluid) and its Reflection of the Central Nervous System Pathology", illustrating his lecture with lantern slides. The discussion was opened by Dr. Norton L. Wilson, who was followed by Dr. Jack Blumberg and others.

New members elected were Drs. Herman H. Goldstein, Walter H. Cole, Jr., Joseph E. Franklin, George H. Friedburg, Joseph J. Butenas, Joseph Sadoff, Albert G. Gorczyca, Russell G. Birrell, all of Elizabeth; and Fred T. Hutton, of Plainfield. Four proposals were also received for action at the next meeting.

While the society was in session, its Woman's Auxiliary held a meeting at the Nurses' Home. Mrs. H. V. Hubbard presided and Mrs. Charles A. Hoffman, of Plainfield, was elected recording secretary. Following the meeting both groups joined and refreshments were served.

**Summit Medical Society**

W. J. Lamson, M.D., Reporter

The regular monthly meeting of the Summit Medical Society was held at Wallace Pines on Tuesday, January 27, with Dr. Prout entertaining, and the President, Dr. Smalley, in the chair. Present: 26 members and 8 guests.

The paper was read by Dr. Aaron S. Price, of the Polyclinic Hospital, New York, on "The Clinical Interpretation of Differential Blood Count".

In appendicitis we look for an average leukocytosis of 15,000 to 20,000. In general the more acute the attack the higher the count will be.

In tuberculosis the polys are slightly diminished, with a relative mononucleosis. An increase in the polys shows a secondary infection.

In acute rheumatism the leukocyte count will run to 16,000, and in order to avoid cardiac compli-

cations it is necessary to keep the patient flat on his back in bed until the count reaches normal, generally about 6 weeks.

In post-hemorrhagic anemia, and after splenectomy, there is a transitory leukocytosis.

Eosinophilia, as high as 20%, occurs in trichiniasis. It is an allergic reaction, and occurs also in chronic bronchial asthma and in some skin diseases.

Mononucleosis, 8 to 10%, in tuberculosis denotes activity of the disease, but this is a favorable sign. In typhoid there is a leukopenia with relative mononucleosis. The toxin is destructive to leukocytes.

In children with acute infections there is a tendency to revert to the primitive kinds of leukocytes; thus, in pertussis, we find a large percentage of lymphocytes.

The paper was discussed by Drs. Thomson, Disbrow, Krauss, Prout and Johnston.

### WARREN COUNTY

F. A. Shimer, M.D., Reporter

A regular quarterly meeting of the Warren County Medical Society was held January 20 at Farrell Arms Plaza, Washington, at 10.30 a. m. Dr. H. B. Bossard, the President, officiating. Members present: Drs. H. B. Bossard, A. Zuck, F. Curtis, G. H. Bloom, L. C. Osmun, C. B. Smith, G. W. Cummins, G. O. Tunison, G. G. Mills and L. H. Bloom. Drs. H. O. Reik and J. B. Morrison, of the State Medical Society, and Dr. Paul Correll, of Easton, Pa., were in attendance as guests.

Dr. Correll read a very interesting paper on "State Medicine".

Dr. Morrison also read a paper on the present medical conditions, and Dr. Reik discussed both papers. Dr. Osmun spoke of the advantages of a Post-Graduate Course offered by the State Society and urged the support of members.

There followed a general discussion in which everybody took part. The meeting adjourned, and dinner was served in the dining room of the Plaza.

## Obituaries

SAVOYE, Richard G., of Westfield. Resolutions adopted by the Union County Medical Society in special session:

Whereas, Almighty God in His all-wise providence has chosen to remove from our midst our fellow member, Richard G. Savoye, of Westfield, New Jersey:

Therefore, be it resolved that in his death this society, the community for which he lived, and the profession at large have sustained a great loss.

Resolved, we express our appreciation of his interest in Public Health work as President, for many years, of the Board of Health of Westfield, as a member of the Mosquito Commission of Union County, and as a public spirited citizen.

Further, be it resolved that our sympathy be extended to his bereaved family; that these resolutions be spread in full on the minutes of this society, and that a copy be sent to his family.

J. B. Harrison.  
F. A. Kinch.  
G. S. Laird.

MOORE, John H., of Bridgeton, passed away Jan. 2, 1931, at the age of 75 years. Born in 1855, son of a physician, Dr. Joseph Moore, he graduated with honors at Princeton and then acquired his medical degree at the University of Pennsylvania in 1880. Throughout his long and successful career as a physician and an active civic worker, Dr. Moore found time to pursue steadily his study of the classics. One could not know him an hour without discovering that he was a "learned" man; and yet withal he was modestly personified.

Outside the field of medical practice his greatest service was rendered to the school affairs of Bridgeton, and he served for 19 years upon the local Board of Education—continuing in that office until he had attained his dream of a satisfactory High School for that community.

### The Meeting

By Anna Hamilton Wood

When Death and I come face to face at last,  
I do not think the burden of the past  
Shall lean between us, but that I shall find  
A gentle, valued friend, consoling, kind,  
With depth of understanding so profound  
That rituals and creeds shall be unwound  
And, like frayed edges of a garment worn  
Past usefulness or beauty, shall be torn  
And thrown to discard. My nude soul shall stand  
Humble but shameless, and await command  
For further service; years that went before  
Locked out of sight forever by the door  
Of silent Time, their only impress shown  
By the degrees my spirit-life has grown.  
How I shall smile to think that once I feared  
This kindly comrade whose dread shape appeared  
Cruelly distorted in his earthly guise—  
For Death is God's dear shadow to the wise!

The Cumberland County Medical Society, at a special meeting called for the purpose, adopted the following resolutions:

"The passing of Dr. John H. Moore has left, in medical and social circles, a gap we cannot hope to fill. A scholar and a gentleman of the old school, Dr. Moore has exemplified for us the high standards and excellencies of his generation. Personal dignity was his, unswerving loyalty to his obligations and a fine sense of values, which led him always to set the spiritual things of life, above the gross and mercenary. Primarily he was a man of intellect.

Those of us who were associated with him in hospital and general medical work, as well as those who shared his leisure hours, were alike impressed by the brilliant mentality that enlivened all he did. Fullness of years brought him a profound philosophy of life, so that he met ill-health and misadventure without bitterness, and contemplated the inevitable with a calm fortitude. In the feverish rush of crowded days, it behooves us, his colleagues, to pause a moment for his memory's sake, and take heart and inspiration from the honorableness of his wise and quiet ways."



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 3      ORANGE, N. J., MARCH, 1930

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## DEVELOPMENT OF PUBLIC WELFARE WORK\*

COMMISSIONER WILLIAM J. ELLIS  
State Department of Institutions and Agencies  
Trenton, N. J.

The law creating the State Board of Control of the Department of Institutions and Agencies expressly enjoins that the state welfare activities "shall be humanely, scientifically, efficiently and economically maintained and operated". As a major policy, in pursuance of this requirement of law, the State Board of Control has recognized the fundamental importance of emphasizing the advantages of a program of intensive treatment, training and rehabilitation instead of mere custody of the wards of the state. To the medical profession of the state and to the allied professional workers in the laboratories, in the nursing and educational profession, the welfare institutions of New Jersey have turned with confidence for the purpose of carrying out these general policies.

Great progress has been made in the past 12-15 years in transforming public institutions from places for custody only into treatment hospitals and community centers for physical, mental and social rehabilitation. The legislature and successive governors have supported this program of treatment and rehabilitation because they were convinced that the advantages, both in terms of happiness and

human welfare, as well as in terms of dollars and cents, are outstanding.

In hospital and other treatment institutions of the state and counties under this program of treatment and rehabilitation, keepers and guards have largely been replaced by nurses, teachers, and occupational and physical therapy workers. The medical staffs have been enlarged. They have also been supplemented by the addition of resident dentists, pathologists, laboratory and x-ray technicians. It is an out-worn view of public institutions that they are places in which unfortunate individuals with mental or physical illnesses should be locked up, simply to protect the rest of society from infection or annoyance. Modern institutions, such as the state and county institutions in New Jersey, are most important factors in the care, training and rehabilitation of mentally and physically disordered persons. They play an important rôle in the prevention and control of the diseases afflicting these persons. In addition, they are or can become very important human laboratories. New Jersey has taken a leading place in the work of modernizing and equipping state and county institutions to provide scientific care and assisting these institutions in serving as centers for disease prevention activities.

### WORK IN THE FIELD OF TUBERCULOSIS

Great progress has been made during the last 25 years in reduction of the tuberculosis mortality rate in New Jersey, as elsewhere, due to the joint efforts of many coöperating forces. The remarkable decline in the number of cases throughout the state has been an

\*(Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)

important contributing factor in prevention of the spread of tuberculosis. This decline is indicated by a drop in the mortality rate from 179.5 per 100,000 of the population in 1904, to 74.9 per 100,000 of the population in 1929; a decline of 58%. Many patients are now seeking hospitalization in the early, curable stages of that disease, when they will respond to treatment. Thus the chances are increased that they may be discharged from a sanatorium without danger to the community. Improved state and county hospital facilities and the application of modern medical methods have been instrumental in reducing the number of cases of tuberculosis in the state.

Through the Extension Department of the New Jersey State Sanatorium at Glen Gardner more than 50 regular clinics are held every month in various parts of the state for examination and consultation, and approximately 7500 patients annually are thus advised by competent tuberculosis specialists. The work of the County Sanatorium clinics in Hudson, Bergen, Passaic, Union, Camden Counties and elsewhere is outstanding in this connection. The specialists serving these clinics report that the majority of patients are referred to them by practicing physicians, and the clinics are working in thorough accord and coöperation with the medical profession. These clinics serve a most important function in making competent, specialized diagnostic facilities available to the people of the state, even in remote rural communities. The research activities of the Department and of the Glen Gardner Sanatorium play an important part in pointing out the nature and extent of the tuberculosis problem. A survey recently completed by the Research Division indicates that despite progress made in this field there is still great need for intensive, curative, as well as preventive work. The recently published study revealed that 42% of the 2500 patients entering New Jersey sanatoriums for the first time in 1929 were between the ages of 15 and 29. This study further showed that there is special need for increased activity on the part of clinics and the sanatoriums for the negroes; as 20% of the cases of tuberculosis in New Jersey occur

among negroes, who make up only 4% of the state's population. This recent study also revealed that patients are not remaining in sanatoriums as long as is desirable; 15% of those discharged remained less than 1 month; 27% less than 2 months; and 38% less than 3 months. Due to economic and social reasons, many patients leave the sanatorium while they are still a source of contagion to the community.

Further success in solving the problem of tuberculosis in New Jersey can best be secured by emphasizing to the public the necessity for recognition of the early symptoms of tuberculosis and the prompt seeking of competent medical care and direction.

#### CAMPAIGN AGAINST MENTAL DISEASE

New Jersey, in common with other states, has been waging an active campaign against the apparent increase in mental disease. The disturbing fact is that the rate of increase of populations of hospitals for mental disease here, as elsewhere throughout the country, is exceeding the rate of increase of the general population. Between 1910 and 1920 the general population in New Jersey increased 24.4%, while the population of the mental hospitals increased 36.4%. The Medical Society of New Jersey recognized the outstanding importance of this problem when at its meeting in 1929 it appointed a special committee, headed by Dr. Elmer Chase Jackson, to coöperate with other agencies in dealing with this problem. The State Board of Control, through its Committee on Mental Hygiene, of which Drs. Ambrose F. Dowd, Augustus S. Knight, Joseph E. Raycroft and George O'Hanlon, Mrs. H. Otto Wittpenn and the writer are members, has coöperated with Dr. Jackson and others in outlining a program that is adapted to the needs of this state. The Mental Hygiene Committee has conferred with leading specialists in this and other states and has outlined the following major objectives as a means to check the growth of mental disease and to discover effective preventive measures:

- (1) We should continue our efforts to transform existing mental hospitals into modern treatment and curative institutions; this means the



provision of adequate treatment facilities and a trained medical staff with consultants to carry on intensive treatment work, using the approved methods of treatment applicable to these patients.

(2) There should be an increase in the psychiatric social service or follow-up field work, so as to enable mental hospitals to parole early, under proper conditions and safeguards, a greater number of patients who can be satisfactorily adjusted in the community.

(3) There should be a continued extension of the mental clinics based on the mental hospitals to serve the communities in the diagnosis of mental and nervous disorders, and to reach potential sufferers from nervous or mental disorders.

(4) The local communities should be encouraged to develop psychopathic departments for mental and nervous patients as part of the local general hospitals. Such a psychopathic department connected with a general hospital would be valuable as a "first aid station". It is suitable for the nervous patient who feels the need of special care but is unwilling to go to a public hospital for the insane.

Under these conditions the physicians and psychiatrists can make their observations and diagnoses and can outline treatment. This, in many cases, will make it unnecessary for these patients to seek admission to the state and county mental hospitals. Medical specialists in mental diseases, psychiatrists in the local communities or from the state or county hospitals, can be secured as consultants to these psychopathic departments of the general hospitals.

Mental patients should not be committed to jails or lockups, as is now often done. These persons are sick mentally and should be sent to psychopathic departments of general hospitals, properly equipped to care for such persons.

The Department has issued a publication outlining some practical suggestions for the development of psychiatric wards in connection with the wards of general hospitals. Copies of this pamphlet were mailed to all members of the State Medical Society and the recommendations of this report have met with the cordial approval of such outstanding leaders in this field as Dr. Adolf Meyer, of Johns Hopkins University; Dr. Samuel Hamilton, of the New York State Commission on Mental Disease, and many others.

Those persons whose mental condition requires hospitalization, and yet are not willing to enter public institutions for the care of mental diseases, can frequently be persuaded to enter general hospitals equipped with

psychiatric wards. The success of psychiatric wards in connection with the general hospitals in Detroit, Albany, Jersey City and elsewhere argues for the practicability and effectiveness of this plan. General hospitals in most communities already possess most of the facilities necessary for treatment of nervous and mental diseases, with relatively minor changes in physical equipment and with the services of practicing physicians and specialists in the community, supplemented by consultation service from state and county hospitals and clinics.

Great progress can be made in bringing about earlier recovery and in making commitments to the county and state hospitals unnecessary. The establishment of such psychiatric departments in general hospitals throughout the state is being urged by the Department, and coöperation of the medical profession and hospital boards is asked to assure success of this plan.

#### MENTAL HYGIENE CLINICS

Probably no phase of the state mental hygiene program is more important than that dealing with mental hygiene clinics. The major work of these clinics is to provide opportunities for early diagnosis of tendencies and weaknesses that may, under strain, develop into some form of mental weakness or insanity, and to suggest treatment that will counteract such tendencies. Twenty-five mental hygiene clinics have been established in coöperation with local medical authorities and general hospitals. Coöperation of the medical profession is particularly essential to their success. If incipient nervous and mental disorders can be detected in the early stages, many social and economic disasters can be avoided. That practicing physicians recognize the value of these clinics for early diagnosis of mental affections is indicated by the fact that during the past year more than half of the patients attending such clinics were referred by their own physicians. The state does not aim to duplicate any existing diagnostic services, but rather to supplement the work of the general hospitals and the local medical profession. In no case have the clinics been established except upon request of local authorities.

### MENTAL HOSPITALS

Great progress has been made in the treatment of mental diseases in state hospitals. These hospitals, which only a few years ago were looked upon as asylums for the insane, have been provided with modern equipment for complete diagnostic services and for intensive treatment of complicated physical and mental conditions. The half-mill tax has made possible, for example, provision of a modern treatment and reception unit at Greystone Park State Hospital, where well-equipped departments are provided for the resident and visiting staffs of the institution to carry forward their complete diagnostic and treatment services. Similarly at the Trenton State Hospital, with provision of modern equipment such as is found in general hospitals, the physical plant for correction of all types of physical and mental defects has been provided. In addition to medical services rendered to patients, occupational therapy, physical education and recreational activities of these hospitals are under close supervision of the Medical Department and are regulated in accordance with the mental and physical needs of the individual. The modern conception of mental disease as something capable of improvement and cure in a large proportion of cases under proper care and attention, has resulted in preventing many patients from becoming custodial patients requiring a long term of hospital residence. Many valuable research studies into the causes, treatment and prevention of mental disorders have been made at the state institutions and the Department is beginning to put into effect the results of their findings.

The place of New Jersey, as a leader in the field of mental disease treatment, has already been established through work accomplished by the Medical Director of the Trenton State Hospital, Dr. Henry A. Cotton, and Dr. Marcus A. Curry, Superintendent of Greystone Park, and the well trained and experienced resident staffs of these institutions.

### WORK FOR THE EPILEPTICS

The work of the State Institution for Epileptics, at Skillman, which is recognized

throughout the country as one of the leading institutions of its kind, is especially worthy of mention. The gap left by the death of Dr. David F. Weeks, for more than 20 years Medical Director of the Skillman Village, has been ably filled by his associate for more than 15 years, Dr. Daniel S. Renner, who has built up during the past year a splendid staff of competent medical men who are pursuing careful investigations into the causes of epilepsy and the most promising methods of treatment.

### THE TRAINING OF MENTAL DEFECTIVES

In the field of mental deficiency New Jersey has developed a plan of segregation and intensive treatment looking toward self-support for those who are capable of being returned to the community. The work of the Vineland institutions is well known to all. Through coöperation of the Research Department of the Training School at Vineland the State Board has outlined a program which counts upon the full coöperation of medical and educational authorities, social agencies, and public health officials. Fundamental to such a program is the provision for early identification of all persons of degenerate stock, with institutional care for those whose degree of intelligence is so low that they cannot care for themselves or provide decent surroundings for their children. Industrial colonies and agricultural colonies for high grade defectives are being developed so that mentally defective persons may find protection and an opportunity to contribute largely to their own support while under institutional control and supervision. Further extension of the training of backward and defective children in the public schools is an essential and important phase of this program of control of the mentally deficient. It was through the work of Goddard and Doll, at the Training School at Vineland, that adaptation of the Binet tests for the measurement of intelligence of English speaking children was made possible. This laboratory is continuing to make important advances in the field of research. It is our belief that the state could well afford to concentrate upon additional efforts in this



direction. We have passed the period when the public generally is satisfied with mere segregation as an adequate solution on the part of the community to the growing problem in the field of mental deficiency, as in the field of mental disease. New Jersey has been a leader in developing methods of diagnosis, institutional training and reëducation. It must also develop, and, in every possible way, increase the fund of knowledge as to causes of mental disease and mental deficiency. In this connection our chief reliance is upon the well trained professional workers—psychiatrists, psychologists and laboratory aides—who can point the way to better control of these problems.

### CRIME AND DELINQUENCY

The field of crime and delinquency, which has attracted special attention in the past year, looks to the medical profession and to sociologists for basic data, so that promising efforts can be made to prevent and control the appalling increase in delinquency and crime. For the past 12 years New Jersey has been applying in its correctional institutions methods of diagnosis and treatment made available from the fields of psychiatry and general medicine. Thorough-going physical and mental examinations have been made of all individuals committed to the penal and correctional institutions. Recently, at the request of the National Committee on Prisons and Prison Labor, a complete survey of the findings of the individual classification and study of the population of the State Prison has been completed. In this work the Department has had the assistance of Hon. Joseph D. Sears, a member of the Board of Managers of the State Prison, and Dr. Edgar A. Doll, of the Research Department of the Vineland Training School, a member of the managing Board of the Rahway Reformatory, and the personnel of the Mental Hygiene Clinic which serves the correctional institutions. The study, based on the classification of 2500 male prisoners, includes 2000 prisoners committed to the New Jersey State Prison during the past 3 years, and 500 additional prisoners who were committed prior to 1927. It will be of interest, I am sure, to those

of you who have been watching closely the public discussion of crime and delinquency to know that New Jersey, through a modern plan of classification, has grouped its prisoners into 4 general classes, as follows:

(1) *Difficult Class.* This class is composed of prisoners who are recidivists, who have antisocial tendencies or who are diagnosed as psychopaths and constitutional defectives, etc. This class makes up a large percentage of the prison population and requires, by and large, close custody and close supervision.

(2) *Better Class.* This class is composed of normal prisoners who are mentally and physically able to be adjusted to society. For the purpose of custody and training this class has been divided into 3 groups:

(a) Normal prisoners who because of the type of crime committed, or the length of sentence, require close custody but are suitable for shop work and will probably form the backbone of the prison shop organization.

(b) Normal prisoners who are believed to be stable and trustworthy and may be employed at prison farms, road camps, etc., where only limited security and supervision are necessary.

(3) *Feeble-Minded.* Composed of border-line, feeble-minded and simple feeble-minded, which include high and low grade morons and high imbeciles.

(4) *Infirm or Indigent.* Composed of aged or senile, chronically ill and the seriously crippled. This group may be segregated on farms of limited security where they may be required to do no more difficult work than their infirmities will allow.

Of the 2000 commitments to the State Prison during the past 3 years, 35.5% have been placed in Class 1, the so-called "Difficult Class".

The classification grouping of prisoners designated as the more reformable, better type of prisoners includes those normal prisoners who are mentally and physically able and likely to respond to processes of rehabilitation. This group has been subdivided into those normal prisoners who, because of crime committed or length of sentence, require close custody but who are suitable for assignment in the Industrial Department and are capable of industrial trades training with favorable outlook for parole; 13.4% have been grouped in this class. A subdivision of this same classification of normal prisoners who are believed to be stable and trustworthy and who may be usefully employed at prison farms, road camps and land clearing enterprises, where only limited supervision is necessary, included 37.5% of the 2000 prisoners studied. Group 3, the definitely feeble-minded, makes up 10.5% of the whole number of 2000 prison-

ers. Nearly 2% (1.7) were classified as aged or senile, chronically ill and seriously crippled, requiring segregation on farms with limited security. Of the total number of 2000 commitments only 1.5% were diagnosed as definitely psychotic and epileptic.

#### INSTITUTION FOR DEFECTIVE DELINQUENTS AN URGENT NEED

In developing a state program for meeting the penal and correctional problems, special attention must necessarily be directed toward the mentally deficient group, including also the psychopathic and constitutional defectives, who are not good risks for parole from the penal and correctional institutions to the community. The classification studies of these prisoners indicate the necessity for a special type of institution for defective delinquents, as developed at Napanoch, New York, and Bridgewater, Massachusetts. It is unwise public policy, and in every respect poor business, to release this type of offender under parole conditions without a long period of penal or correctional institution care.

One of the outstanding needs in New Jersey is the development of a specialized institution for defective delinquents, thus removing from the penal and correctional group the type of prisoners with whom these institutions are ill prepared to cope. They should be placed under medical and custodial supervision, as they are not likely to respond to processes of social rehabilitation and at the end of a fixed term in a penal institution must under existing laws be released only to repeat their offenses. No more urgent problem faces those responsible for penal and correctional affairs. No adequate solution can be projected for the problem of crime and delinquency without stressing the need for specialized facilities for segregation and long continued care of this type of prisoner under conditions where he may be usefully employed and where society can be secured from repetition of his criminal propensities.

Throughout the institution system the work of the medical profession and other specialists has been of the greatest helpfulness and significance.

#### SUMMARY AND CONCLUSION

I would sum up the development of the outstanding policies for the institutions of the state as follows.

(1) We have emphasized the importance of treatment, training, and wherever possible social rehabilitation, instead of mere custody of the wards of the state.

(2) The coöperative features of institutions have been stressed particularly by emphasizing the unity of the institutions of the state, providing for interchange of products of institutional labor, for example, and application of methods of treatment developed in the hospital group, to the same types of individuals when found in the correctional group.

(3) Through its welfare divisions, we have stressed the importance of prevention and of using the institutions as social laboratories where the lessons learned through treatment of the abnormal may be brought to the public.

(4) There has been developed a plan for informing the public along constructive lines of the work of the local institutions and agencies.

In addition to the responsibilities for general policy-making for the development of the state institutions and agencies, the State Board has responsibility for visitation and inspection of all county and city jails, places of detention, county and municipal work-houses, county penitentiaries, county insane and tuberculosis hospitals, poor farms, alms-houses, county and municipal schools of detention, and of privately maintained institutions and agencies for the care and treatment of insane, blind, deaf, dumb, epileptic, feeble-minded, or other physically and mentally defective, and for the care of dependent and convalescent children.

In its relations to local institutions, whether public or semi-public, the Department has sought to assist in building up local initiative and promoting a sense of local responsibility. It has aimed to promote a wider knowledge of the methods of care, treatment and training of the mentally and physically handicapped, and has advised as to standards of management, building, construction and medical care for the wards of the state, counties and municipalities. Through the Department there is



afforded an opportunity for leadership in specialized service, utilizing not only the full time employees of the Central Department, but also making available the expert heads of the several institutions of the state or the members of the staffs of these institutions, for the benefit of other institutions of the state and its subdivisions.

In line with its general policies, the Department and the institutions have developed specialized clinics, based upon the large state hospitals and staffed by experts from these hospitals. These clinics, serving in the field of mental hygiene and tuberculosis, have extended their services from the state institutions without duplicating or interfering with the services of the local hospitals. Underlying policies in the development of clinic service have been coöperation with local general hospitals or special hospitals for mental diseases or tuberculosis; limitation of service to diagnostic work or follow-up work of patients who have been released from the state institutions; and development of the full use of local physicians and local hospital facilities. These policies have won support and coöperation in all centers where clinics have been established, and have brought about a splendid spirit of coöperation between state institutions and local clinics and hospitals.

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### INFLUENCE OF PUBLIC HEALTH ACTIVITIES ON MEDICAL PRACTICE\*

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For the past 2 or 3 days we have been hearing a great deal about the relation of the profession to public health activities, and I think you have had it dealt with in several ways. One of the speakers was disposed to give us a sense of security by ridiculing some of the modern trends and tendencies. Another was disposed to instil in us a considerable

sense of fear in dealing with the subject. I am prompted to try rather to help us understand some of the motivations behind both the public health activities and the medical profession. I think we can take a leaf from the modern tendency in psycho-analysis and realize that if once we succeed in understanding why we do things, it is much easier to correct our method of doing them, and so I ask you to follow me in an attempt to explain in a rather cursory way the trend of public health and also the trend of medical practice.

It is perfectly obvious to all of us in this discussion that public health activities have removed from medical practice a considerable amount of disease and sickness. It is also obvious, I think, that public health has created a great amount of practice, if we are disposed to take advantage of the opportunity.

Public health can be divided practically into 3 phases: The first may be described as that which deals with prevention of disease through the control of environment. Public health departments, learning through the research work of epidemiologists that certain diseases could be controlled and prevented by controlling milk and water supplies, established elaborate systems for inspection and control of those essentials in living, which have practically eliminated milk-and-water-borne diseases; for instance, typhoid fever. Now it is important to point out that individual physicians recognized that this type of control could not be accomplished by the individual doctor but had to be accomplished by governmental bodies; and so physicians, themselves, were the first to encourage and help to develop this governmental activity in the prevention of disease. You know that today, as a result, there is practically no typhoid fever for us even to demonstrate to younger medical men, while a generation or so ago it carried off a goodly percentage of our population.

Then came, a little later, recognition of the relationship of carriers of infection by insects; and again the medical profession heartily helped to develop control of disease through the elimination of breeding places of mosquitoes and flies and by the screening of homes to protect individuals from infected in-

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\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)

sects; and in that way we have practically eliminated yellow fever, malaria, and similar insect-borne diseases. This type of public health activity received full support of the medical profession, although it very obviously eliminated disease and reduced medical practice. It is worthwhile to stop a moment and ask why this type of public health activity obtains so fully and readily the support of the medical profession? I believe the reason is that it dealt largely with environment; and I think in the development of our thesis if we will keep this in mind we will see the gradual shift, and possibly an explanation for the change of attitude on the part of doctors.

The second phase of public health activity concerned itself more with prevention of disease by protecting the individual. Into this category we would place activities for the prevention and control of small-pox, diphtheria, scarlet fever, and measles. Diphtheria, you know, can be prevented by the immunization of individual patients, not by control of the environment. Of course, the classical example of this type of activity is the control of small-pox. Here we are dealing with a considerably different type of public health activity. The purpose again is to prevent disease and to postpone death, but it is accomplished not by the control of environment, as was pointed out in the first phase, but by dealing with the doctor's patient or prospective patient directly. Vaccination has been carried on largely by the individual physicians. However, with the recent development of hospital clinics, and, more particularly, medical departments in boards of education, the tendency has been to vaccinate children, without charge, at public expense, irrespective of the financial status of the child's family. More recently, there has been introduced the prevention of diphtheria through immunization by toxin-antitoxin. Again physicians and the organized medical profession lent themselves enthusiastically to propaganda for the prevention of disease through treatment of the individual. It was obvious that the effect of this kind of public health activity would be markedly to reduce medical practice which came from the treatment of this rather fre-

quent and serious disease of childhood. In the zeal to protect children against disease, it was recommended in many cities and states that this immunization be carried out at public expense in clinics established by the health departments or boards of education. This plan meant free treatment, irrespective of the financial status of the family. In some places the community itself employed a single physician to administer the treatment; but this last mentioned activity is a type of public health activity which, to my mind, should become part of the newer medical practice and should not be carried on through free clinics, even though the administering physician is paid.

The function of a public health department should be to stimulate an interest in the medical profession to carry on this newer kind of medical practice, and to arouse an interest in the public to have the children promptly and properly immunized. I know that this is a much more difficult and slower way of getting children immunized, but I somehow feel that public health departments are breaking faith with the medical profession and, in the long run, will injure the cause of public health if they do not insist that this phase of the prevention of disease through treatment of the individual shall be carried on by the individual doctor rather than by public departments. It must be said, however, that the attitude of many physicians has been the very reason or excuse, if you will, for public departments carrying on this work. Many physicians have not taken an interest in the newer methods of prevention and actually have been indifferent to or antagonistic toward such methods.

The third phase of public health activity may be described as dealing with personal hygiene. It has to do with education of the individual in the art of living, and in the individual's control of his own environment. The purpose of this type of public health activity is much more than the prevention of disease or the postponement of death. It has for its object an increase of the individual's healthfulness and vigor. In a larger sense, its purpose is the individual's happiness through physical well-being. It includes prenatal care, infant hygiene, preschool hygiene, mental hy-



giene, the more modern development in school hygiene, annual examination of adults, and so on. In this group of public health activities we have again developed a type of work for the physician which the doctor, steeped in traditional medicine, has hardly considered medical practice. It has no morbid anatomy, it has no pathology, it does not consist in the discovery of diseased organs, it cannot be carried on by the writing of a prescription. It consists very largely of advice, of teaching a person what the normal individual should be like and is capable of, how he should eat, sleep and live.

The development of public health activities, then, has run from the control of environment to the education of the individual in the art of living, together with protection of the individual from disease by immunization. If we will consider for a moment the history of medicine, I think we shall be able to see why it is that certain physicians are unable or unwilling to adjust themselves to what must become part of the newer medicine, if the doctor, as we know him today, is to survive or if he is to render the fullest service to humanity. We need only look at medicine less than a century back to note the great change which has come over medical practice. Then, the doctor felt that his whole purpose was to discover the disease from which the patient suffered. The etiology of disease was too indefinite to permit any rational therapeutics, and so the scientific doctor felt that it was quite beneath him to concern himself with anything more than an accurate diagnosis. As Jacobi expressed it, in describing medicine as he was familiar with it in Germany around 1850: "The best a patient could expect was to be auscultated by Schoda and autopsied by Rokitansky." Toward the end of the last century, as a result of work by Pasteur, Ehrlich, and Koch, the etiology of disease became clearer and therapeutics developed its more rational basis. In addition to our interest in morbid anatomy and physical diagnosis, therapeutics became a well-established and accepted part of scientific medicine. Physicians eagerly used antitoxins for diphtheria, tuberculin, vaccines, and the many different meth-

ods for specific treatment which developed as the result of the scientific work of that period. But during the past 25 years, medical education and training have quite naturally been given over entirely to study of the pathology of disease and its treatment. A few men have recognized that much disease can be prevented, but it has been practically impossible to familiarize all physicians with this newer knowledge, or to arouse a general interest in its application. I think the attitude of certain physicians toward the more modern practice of medicine, which should include every possible method for furthering human welfare, whether it be by education or by the prescribing of a drug or by the administration of an antioxin, can be understood, if we think of the medical profession as being made up of individuals some of whom have been arrested in their development at one or another period in the development of the art and science of medicine. Lombroso, in his study of criminology, has explained the antisocial conduct of individuals by pointing out that their conduct is only antisocial because they are apparently living in a former stage of civilization. Those people who are considered criminals in this generation or century would be considered normal with similar conduct several generations back. So it is with physicians.

It is very natural that physicians should think of the practice of medicine as dealing only with the recognition and healing of disease, but it becomes necessary to point out that unless they recognize also that we have reached the point where the public demands it be educated in the prevention of disease, in personal hygiene, in development of the fullest vigor and health, the public will obtain this instruction from other sources. We must realize that society in America is organized on quite a different basis from that of a generation ago. There are enormous foundations eagerly awaiting the opportunity to subsidize large community efforts, first for the prevention of disease, but not far off for the treatment of disease also. Public departments naturally will respond to public demand. There are today in public health departments men

who feel it is their duty to protect the public against disease. If they find the individual physician indifferent or antagonistic to assuming the rôle which is offered, it, of course, will be assumed by public departments.

Public health activities, then, have had a two-fold effect. They have eliminated disease, itself, but they have replaced it by a new type of medical practice. The future development of medical practice and public health activities will depend upon the attitude of physicians and the organized medical profession. If it becomes sufficiently aware of the trend of public health activities and satisfies the community that it can be protected through the private physician, there will be less tendency to place the new public health activities, which deal with individual protection, in the hands of public departments. Welch, in his second Sedgewick Lecture in Boston, summed up this question as follows: "I should like to refer very briefly to a matter which seems to me of serious concern to modern public health. This is the lack of sufficient active participation of the general medical profession in public health activities, especially as developed in this country. The fault is on both sides. There has been encroachment upon the field of the private practitioner and there has been a lack of sympathy and coöperation with public health officials and with health programs on the part of practitioners. There can be no real lasting success of efforts to promote the health of the people and to prevent disease without the active sympathy, support and participation of the medical profession. How this is to be more largely secured merits the most serious consideration."

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### HEALTH DEPARTMENT GROWTH IN NEW JERSEY\*

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Public health work in New Jersey, as a function of state and local governments, is 53 years old. The first State Board of Health

was created in 1877, and 10 years later the law requiring local boards of health was enacted. In this one small state there are now 561 local health boards. They consist of more than 2800 members and employ about 580 persons on full time and 760 on a part time basis. Appropriations from public funds for the work of these 561 boards in 1929 amounted to over \$2,000,000. It should be borne in mind, for the purpose of this paper, however, that many of the 1340 employees are clerks and secretaries and that only 119, or 21%, of the 561 municipalities and townships employ licensed health officers, and that three-fourths of the money is spent in the 50 cities and towns having over 10,000 population.

This vast number of separate bodies is the result of a law that requires each municipality and each township, no matter how small in size or population, to have its own public health organization. Four decades ago, such boards may have been able to carry out the best sanitary practices of that day. Today, many of them are not.

In the field of medicine, the advances of the last half century have been monumental. As a result of some of these advances and those in other professions, health departments have grown in the amount and complexity of work delegated to them, as well as in numbers. Their activities now include control of communicable diseases, supervision of milk, food and water supplies, recording of vital statistics, regulation of plumbing, inspection and abatement of nuisances, health promotion, and a multitude of related matters. They may adopt ordinances and enforce rules and regulations relating to a wide variety of subjects.

Public health laws of New Jersey fill a volume of nearly 400 pages and the State Sanitary Code adds 30 more. Wise, indeed, is he who can find his way through such a maze of words and not get lost. A number of these laws impose exacting duties on physicians. In the busy round of practice, it is easy to understand how some of these duties are occasionally forgotten by doctors. It has occurred to me that a small booklet setting forth these requirements of law in compact form might be helpful to you. Such a book-

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\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)



let is now being prepared by the State Department of Health.

One important change since 1877 is in our point of view toward communicable diseases. Emphasis used to be placed on human surroundings and on filth, in the belief that dirt bred disease. This idea probably helped to make us a cleaner race but it fixed attention on visible and often harmless dirt instead of on the unseen kind which we know now is often deadly.

With the knowledge that each communicable disease has a specific, living causative agent and that sources of most of these diseases are persons, not things, our whole attitude toward disease prevention and control has changed. The spectacular retreat of typhoid fever, tuberculosis, diphtheria, malaria, plague, and yellow fever are some of the results of this newer information and viewpoint.

Knowledge as to how disease producing organisms enter the body, battle with the cells and secretions of the body, leave the body and are carried to other persons has put the struggle against this group of diseases and their partial control, at least, on a scientific basis. For this reason, if for no other, common sense and good judgment *alone* no longer fit a man for board of health work, as they might have done 40 years ago. The efficient sanitary officer today must know something of bacteriology, chemistry, epidemiology, engineering and statistical methods, and also appreciate the practical problems of the dairyman, butcher and restaurant proprietor. He should also possess the diplomacy that will enable him to use this knowledge. Health officers and inspectors were formerly sanitary policemen, intent on arbitrarily enforcing sanitary regulations. The modern official, if he is really modern, is a teacher and leader in sanitation and hygiene. He has found that with most people, force is likely to fail in the long run and education is apt to succeed.

The effect of the changes just pointed out has been unmistakable in the growth of both state and local health departments in New Jersey. I have been connected with public health work in this state for 39 years, and with the State Department of Health since 1903. In

that time, I have seen the Department grow from a little group of 15 employees to an organization which is exceedingly crowded in 19 office rooms and 3 laboratories. Its office and field staff now numbers 155 and this number is not sufficient to carry out in a satisfactory way even the mandatory duties imposed by law.

On many occasions, small groups, to whom the department's organization and duties were being explained informally, have expressed surprise and unexpected interest in these matters. Since the physicians of the state are probably the largest group of persons with which the department deals directly and indirectly, I believe the members of this society will be interested in a bird's-eye view of the organization of the State Department of Health, which may have seemed an impersonal sort of thing but which is really composed of men and women whose interest and problems often run parallel to your own.

The work of the department is carried on by 10 divisions or bureaus. They are the Bureaus of: General Administration; Local Health Administration; Food and Drugs; Vital Statistics; Engineering; Venereal Disease Control; Child Hygiene; Bacteriology; Chemistry; Public Health Education.

The Bureau of Administration is defined by its name; it is the business branch of the Department.

The Bureau of Local Health Administration is one with which many of you have direct contact. Epidemiologists connected with this bureau investigate and help control epidemics and smaller outbreaks of communicable diseases, and assist local health and school boards to inaugurate and conduct toxin-antitoxin and Schick test clinics, make sanitary surveys and deal with most of the problems which annoy local health boards until they ask for help. This bureau also receives, tabulates and studies reports of cases of communicable diseases filed by doctors with local reporting officers and by them transmitted to the department. Certain contagious diseases that occur on dairy farms are dealt with by men from this bureau. Other duties too numerous to mention, together with those just enumerated, make greater demands

on the small staff of this bureau than it can possibly meet. The Public Health News, which I hope you all read and enjoy, is also prepared in this bureau. The 2 district health officers, stationed at Freehold and Pitman, report through the chief of this bureau.

Contrary to popular belief, much of public health work is not medical. One of the earliest and still very important parts is sanitary engineering, which has contributed very greatly to progress in disease control and sanitation. The engineering bureau of the State Department of Health carries out duties placed upon the department by 16 different laws. Approval of sewerage systems, disposal plants and water supplies are among these. The word "approval" may suggest a simple procedure but actually it demands a great deal of investigation and study. The examination and approval of plans for nearly \$10,000,000 worth of construction a year is in itself a time consuming and extremely exacting duty. Investigations of stream pollution are conducted by this bureau and also a check on the operation of the 704 water treatment and sewage treatment plants in New Jersey.

Three laboratories are maintained by the department; 1 for bacteriologic examination of specimens from communicable disease cases, 1 for chemical testing of food and drugs, and 1 for testing water and sewage. With the facilities and services of the first, you are doubtless more or less familiar. Specimens from known or suspected cases of communicable diseases, which many of you submit in special containers deposited by the department throughout the state, are grown and examined in this laboratory. Its work has increased each year and reached the impressive total in 1929 of 60,000 specimens.

Our chemists examine a wide variety of products for detection of adulteration and misbranding. These products range from Hamburg steak, artificially colored cakes, canned products and milk, to soft drinks, drug preparations and extracts. Testimony in court takes an appreciable amount of time of the men who make the analyses. An important branch of this laboratory is conducted aboard ship; on the department's floating laboratory

boat, "The Inspector". Sanitation of the shellfish grounds of New Jersey is secured partly as a result of tests of the water and of oysters and clams themselves at Delaware Bay, Maurice River, Wildwood, Tuckerton, Raritan Bay and other producing areas.

The third portion of the laboratory, which is really a part of the engineering division, tests water and sewage. The thousands of samples examined each year come from public water supplies, state institutions, parks, schools, summer camps for boys and girls, bottled waters sold in New Jersey, private wells and springs believed by local boards of health to be polluted, and from sewerage systems and sewage disposal plants. Both chemical and bacteriologic tests are carried out. The laboratory co-operates with the Fish and Game Commission, State Department of Conservation and Development, State Department of Public Instruction, and Interstate Commerce Commission, in testing water used for public or semi-public purposes.

Inspection of foods, and establishments where foods are stored, handled, manufactured and sold, is made by representatives of the Bureau of Food and Drugs. Dairies, pasteurizing plants, creameries, ice-cream plants, slaughter houses, cold storage warehouses, bottling plants, egg breaking establishments, hotels and restaurants are among these. Samples of foods and drugs are collected regularly for laboratory examination. Alertness of this bureau uncovers dangerous practices and products from time to time, stories of which occasionally appear in the public press.

When you sign a birth or death certificate, perhaps you have wondered what happens to the document before it reaches its final resting place. *Perfection* is hardly too strong a word to apply to the system by which these important records, gathered by over 560 local registrars, move with precision on the tenth day of each month to the Bureau of Vital Statistics of the State Department of Health for final study, classification, tabulation and filing. The originals are bound in books, about 6 in. thick, and filed in fireproof vaults in the State House. Searching old records and pre-



paring certified copies of these filed certificates for employment, pension, passport and other legal purposes, keep 3 persons constantly busy. About 150,000 certificates are received yearly and approximately 7,000,000 are now preserved in the vaults. A transcript is made of each marriage, birth and death certificate filed in the State Bureau of Vital Statistics, and forwarded to the Bureau of Census, Washington, D. C., for use in compiling reports on vital statistics issued by the United States Government.

Child welfare appeals to all normal people and the growth of the child hygiene movement in the last decade has been phenomenal. New Jersey's progress in this field has attracted wide attention. The Bureau of Child Hygiene now supervises the work of 132 nurses carrying on a unified program in 400 communities (not municipalities) in the state. Its activities, however, have reduced the number of midwives in the state and greatly elevated their standards of practice. Boarding homes for children, and maternity homes are under its supervision, and courses of lectures on normal children, for nurses and teachers in training, help to keep before them the ideal of healthy, happy childhood.

After receiving silent treatment for centuries, venereal diseases have been attacked since the beginning of the World War in much the same way as other communicable diseases. The Bureau of Venereal Disease Control carries on a two-edged program. On the one hand, it attempts to get cases reported and treated and to learn the name of the person who transmitted infection in each case so that she (or he) may also be treated. Many of you doubtless are active in the medical part of this effort. Demonstrations of newer methods of treatment are given occasionally to medical groups in different parts of the state. On the other hand, the Bureau seeks to inform parents and older boys and girls as to the facts regarding sex and venereal diseases, so that ignorance may play a lessening part in the social problem as time goes on.

Three phases have marked the evolution of public health since its birth 50 years ago. The first was sanitation; the second, disease pre-

vention; and the third, health conservation. In this last phase, education is of signal value and the most recently created division of the Department is the Bureau of Public Health Education. Newspaper stories emanating from this bureau have been used throughout the state during the last year and a half.

You have noted that the State Department of Health has been able to expand its work to conform in some measure to progressive ideas of public health service. What of local health departments?

In cities and wealthy towns where appropriations for public health work are sufficient to employ trained personnel, the services of the health department have kept pace, in general, with our knowledge of sanitation and hygiene. Approved activities for the protection and promotion of health are carried on with rather limited budgets, to be sure, but in ways which throw about residents and visitors to these communities creditable safeguards against preventable ill health. In most boroughs and townships, however, little progress has been made, because of lack of funds. Personnel competent to carry out the activities just mentioned is more costly than a small community can afford. Conversely, most boroughs and townships do not have sufficient board of health work to require the full time of even 1 individual.

Organized public health work might be carried on in a state the size of New Jersey in either of 2 ways. One method would be to centralize all responsibility in a State Department of Health and perform the necessary services through a network of employees spread over the state. Such a system is contrary to the principle of local self government, and, so far as I know, is not recommended nor desired by anyone. Another method places responsibility on local bodies and makes the State Department of Health a supervisor, with power to act in case a local board fails. The State Department of Health could also act in inter-municipal matters and could assist local departments through its specialists and laboratory facilities. The latter is the system adopted by the legislature 43 years ago. It should be a good system but it breaks down if local

boards cannot carry their share of the burden, and that is just what has happened in hundreds of places since public health work became such a complex, technical procedure.

What can be done about it? The only practical correction that I can suggest is to enlarge the local sanitary district until it can support, at reasonable per capita cost, a health department that is able to function. The same problem has been met by several other states in this way. In the south and west, usually the county has been the unit because the county, rather than the town, is actually the local political unit in those areas. I doubt if the county would be satisfactory in all cases in New Jersey. Our counties vary so widely in size, population and in the number of cities and large boroughs which already have excellent health departments, that difficulties would surely arise in reshaping a state-wide reorganization on county lines. Several rural counties in New Jersey might each comprise a unit for health administration. In other sections, a combination of adjacent small boroughs to make a district of 20,000 to 30,000 population might be better. Cities and large towns should maintain their own health departments. Legislative action will be necessary to make the change suggested or any other change which will set up workable health departments in suburban and rural districts. To draw a bill which will meet the needs of the state as a whole and insure a smoothly operating public health organization throughout New Jersey is no small task. To secure legislative approval of the needed changes may be difficult. But the effort should be made, for in the midst of a world moving rapidly toward public health achievements of a high order, many of our small communities are practically standing still, in so far as official health departments are concerned.

No group knows better than the physicians of the state the difference between the carefully planned and executed programs of our better health departments and the haphazard, bungling efforts of the poorer ones when confronted by emergencies. When a plan of reorganizing local health work has been drawn up and meets with your approval, will you,

the medical men of New Jersey, lend your strength toward placing the public health services of this state on the high plane which preventive medicine, sanitary engineering, chemistry and bacteriology make possible?

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## STATE DEPARTMENT OF LABOR IN RELATION TO THE PUBLIC AND THE MEDICAL PROFESSION\*

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HENRY H. KESSLER, M.D.,  
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The Department of Labor was organized and established by law in 1904. Most of you are familiar with the department, particularly in its workmen's compensation and its rehabilitation aspects. The department, however, did not begin as a workmen's compensation bureau nor as a rehabilitation division; it started ostensibly to overcome the exploitation of child labor, which had become rampant in the years just before 1904, when the department was established with a Commissioner of Labor at its head and 2 Factory Inspectors, who were to seek out and investigate any violations of the Child Labor Law. Since that time the department has been enlarged so that at the present time there are 9 bureaus and about 175 employees to carry on its different functions. The first Commissioner of Labor was Col. Louis T. Bryant, who functioned from 1904 to 1923. From 1923 to 1929, Dr. McBride was Commissioner of Labor. The present incumbent is Col. Charles Blunt.

The Department of Labor is now composed of the following Bureaus: (a) General and Structural Inspection Bureau and Explosives; (b) Sanitation and Hygiene; (c) Women and Children; (d) Statistics and Records; (e) Engineer's License, Steam-Boiler and Registration Inspection; (f) Employment and Wage Collection; (g) Workmen's Compensation; (h) Rehabilitation. Each bureau is in charge of a head, who is responsible for the activities of his particular department.

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\*(Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)



In order to carry out the functions of the Bureau of General and Structural Inspection the state has been divided into 22 districts, in each of which a factory inspector is charged with the responsibility of investigating violations of the State Labor Laws; fire apparatus must be investigated, elevators must be properly guarded, as well as machinery, approaches to stairs and fire-escapes must be kept clear at all times, healthful working conditions must prevail, ventilation and exhaust systems, must be installed where necessary, buildings housing more than 25 people must be provided with a standard system of fire signals and fire drills must be held. Accidents are investigated as to their occurrence, so that others may be prevented in the future. Where mines and quarries are located, these must be properly safe-guarded. Assembly halls are inspected if no building supervision is at hand. Wherever explosives are stored these must be maintained in accordance with departmental rules. In addition, illegal employment of women or children is investigated by the factory inspector.

The department also conducts a safety museum, in Jersey City, where is maintained an exhibit of safety appliances and safety methods, which is open to the general public at all times. Safety talks are given from time to time, at different plants, by members of the department.

The function of the Bureau of Hygiene and Sanitation is very closely allied with that of the Department of General and Structural Inspection. The same factory inspectors, in addition to their previous duties outlined, must pay special attention to health hazards, such as dust, fumes, excessive heat, poor lighting or ventilation, washing and toilet facilities, and any special health hazards that may exist. These are all regulated by law, and this is of particular importance in this state because of the wide and extensive existence of industrial hazards, particularly in the northern part of the state. No less a person than Sir Thomas Oliver, of England, several years ago, when here, stated that within a 25 mile radius of Newark existed the largest geographic area

in the world from the standpoint of specific industrial health hazards.

A little over a year ago there was established in Newark an Occupational Disease Clinic. In view of the unusual publicity and unusual number of cases in the field of occupational disease that we had to deal with in previous years, it was thought wise to establish a clinic where such cases might be studied, men might be examined, and a certain amount of information might be disseminated to laymen and to the medical profession. In the past year and a half over 800 persons have been examined in this clinic. Coöperation of the medical profession has been urged, in the reporting of occupational diseases, for the specific reason that as soon as a case is reported to the State Department of Labor a Factory Inspector or the Deputy Commissioner will immediately investigate that case. If poisoning or a special health hazard does exist, he will take measures to remove it, correct it, or eliminate the plant.

In the northern part of the state, history has been made in the field of occupational disease. Radio-active poisoning was put on a definite, pathologic basis by Dr. Martland, and recently a new form of occupational disease, that of silicosis, has been giving us a great deal of thought and trouble.

In addition to these bureaus, there was recently established, under the leadership of Mrs. Summers, a Bureau of Women and Children, to investigate violations of the law pertaining to women and children in factory, mercantile, field and home-work. Especial interest in the migratory child labor problem exists at the present time. As you know, New Jersey has been progressive in the regulation of labor by women and children. We have a Child Labor Law which provides that no child under the age of 14 may be employed, and no child under the age of 16 may be employed in specially hazardous work; we have no night work for women; a 10 hour day law for women; and an 8 hour law for children of 16 years and under.

The Engineer's License Bureau supervises licenses for steam boiler engineers, and steam

boilers are also investigated by the Department of Labor.

The Bureau of Statistics and Records is very important. Records are important in any field of public endeavor, but they are especially so in the Department of Labor, particularly in the Workmen's Compensation Bureau, because rates of compensation and premiums are passed upon and are based upon the accurate statistics kept by this bureau.

The Employment Division conducts free employment bureaus, licenses and regulates private employment agencies, investigates the extent and causes of unemployment, and also cares for the claims of those who have been refused payment of wages earned. Of especial interest to the medical profession is the agitation recently developed for the preemployment examination of domestic servants, similar to that of food handlers for contagious and venereal diseases. The Employment Division has been asked by several Boards of Health to coöperate in refusing employment to those who are found harboring disease. Only a small number of municipalities, however, are as yet coöperating. Of additional interest in this Division is the regulation of commissary camps, which are nothing more in many cases than boarding houses that receive the privilege of housing workers in rural sections. For about 3 years these camps have been licensed and gradually efforts have become successful in securing higher standards of physical condition. It was found that the State Health Code set up regulations affecting these camps only as to polluted water supply, the fireproofing of privies and cesspools and disposition of excremental matter. It was found also that the state of Pennsylvania, through its Labor Department, had developed a very extensive set of regulations concerning every detail of these commissary camps; so a similar set of regulations has now been developed in this state.

To the medical profession, the 2 divisions of the Department of Labor that are of particular interest are the Workmen's Compensation Bureau and the Rehabilitation Division. Enough reference has been given to industrial medicine and traumatic surgery yester-

day and today to give you a little insight into the difficulties that exist and arise between employers and industry at large and the medical profession.

The Workmen's Compensation Law, which is a munificent piece of social legislation, was passed in 1911; New Jersey being one of the first states to pass such a law. Unfortunately, the Department of Labor, or perhaps fortunately, had nothing to do with the passage of that law, and unfortunately the medical profession was given very little voice in making that law, so that we find today a very anomalous situation: We find that a contract exists between 2 parties, an employer and an employee, in which nothing is said about a necessary third party—the medical profession. The Department is charged with the responsibility of passing on claims for industrial accident, determining the awards for disability, passing on bills, etc. In Newark, a Medical Bill Committee was established in order to adjust these matters of disputed medical service bills. This method of handling disputed fees has been found to be a happy solution. There are 3 men appointed to this Committee: Dr. Kraker representing the Essex County Medical Society, Dr. Jackson representing the employers, and myself representing the state. We meet once a month. Bills are referred to the committee for arbitration. The physician involved is asked to appear at this informal meeting, and we invite also a representative of the insurance carrier or the employer. At this meeting differences are ironed out, and in approximately 95% of cases the carrier is willing to and usually does pay the bill or pay whatever this Committee recommends, despite the fact that we have no power in law.

In 1919, New Jersey passed the first Rehabilitation Law. New Jersey felt that her citizens were entitled to the same consideration that war veterans received. When the Federal Government passed a law for rehabilitation of the disabled veteran, it felt that the tin cup and the lead pencil were not the answer to disablement. New Jersey felt the same, and 6 clinics were established in large centers of population throughout the state where any in-



dividual who was physically handicapped by virtue of disability, caused by accident or disease, could come for those services to which the law entitled him. Those services meant treatment, vocational training and placement in remunerative employment if he could work. In the past 10 or 11 years, since New Jersey led the way in the field of rehabilitation, other states have fallen in line, so that almost 40 states now have laws providing for rehabilitation of physically handicapped persons. The Federal Government assists some of these states by subsidy of monies in order to speed the work on. I have some slides here which will demonstrate some of the rehabilitation work and some of the rehabilitation cases, which I would like to show you.

(Lantern exhibition.)

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## THE DOCTOR AND THE LAW\*

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ROBERT PEACOCK,  
Mount Holly, N. J.

On the subject of the Doctor and the Law, I want to speak of law enforcement, not the law enforcement that has caused such an upheaval in the minds of the people of this country but the enforcement of laws concerning your profession and the public health of the state; enforcement of the laws of this state not for restriction of the rights of its people, but the protection of public health. The law that keeps your profession on a higher plane; that rids the community of quackery. Quackery is more detrimental to your profession and the public health, than the *radical red* attempting to suppress the functions of government; because if we do not have a healthy people we cannot have a healthy government.

The gullible public is falling more each day to these so-called "new ideas" of cures, and gradually drawing from the care of doctors, who are trained to cure and keep the public healthy. Is it because your profession deems its standards so high, that you are not educat-

ing the public against these tenets of malpractice, while your opponents are spreading propaganda throughout the state advertising their wares and condemning medicine? It is your duty to start a campaign of education among the people of this state to stamp out these fakers in medicine; to have committees of your state and county medical societies co-operate with the State Medical Examining Board which has this subject at heart, and educate the public on this subject.

Medicine is of all arts the most noble, and the profession should be on a plane of nobility and free from imperfections, and my duty as attorney for the State Medical Board has been to uphold the Medical Practice Law of this state and try in my feeble way to keep your profession on a holy plane, free from violators who would practice this noble art without license.

Hippocrates said in his oath: "As a physician I will keep this oath and this stipulation, by an oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients and abstain from what is mischievous." That same oath still remains the duty of physicians to this day, and it is the foundation of our law that life and health are protected by the law of this state for the benefit of its people, and to protect those who practice the noble art of medicine.

Instruction in medicine is like the culture of the productions of the earth. Our natural disposition is, as it were, the soil; the tenets of your teachers are, as it were, the seed; instruction in youth is like the planting of seed in the ground at the proper season; the place where the instruction is communicated is like the food imparted to vegetation by the atmosphere; diligent study is like cultivation of the fields; and it is time which imparts strength to all things that bring them to maturity. Having brought all these requisites to medicine, and having acquired a true knowledge of it, it is your duty to uphold the traditions of your profession and be physicians in reality, and to coöperate with those in authority to keep from the profession those who do not hold this to

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\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)

be the law, and without partiality prosecute to the fullest extent those who violate the confidence of the people and violate the laws upon which your profession is founded. For that purpose, the Legislature of this state has said that to be a physician to practice in this state certain qualifications are to be had before a person can take the examination, others who do not possess those qualifications are not entitled to take the examination and practice medicine in this state.

Our law says that any person who shall use the word "doctor" in connection with his name and hold himself out as being able to diagnose, treat, operate or prescribe for any human disease, pain, etc., who does not have a license to practice medicine from the State Medical Board is violating the law of this state. Our courts have passed upon this act and have said that it is constitutional. A chiropractor or osteopath cannot use the title doctor. A chiropractor or osteopath cannot give electric treatments. A chiropractor cannot use a concusser or a light to shine in the eye. An osteopath cannot examine eyes. An osteopath can only use his hands for certain replacements. An osteopath or chiropractor cannot give medicines or prescriptions. A chiropractor can only manipulate the spine, by hand.

The Act sets forth \$200 for the first violation, and \$500 for the second violation, or in the alternative a jail sentence. The Board can revoke the license of a physician for the following causes: chronic and persistent inebriety; criminal abortion; conviction of crime involving moral turpitude; for publicly advertising special ability to treat or cure chronic or incurable disease, or where a license has been obtained through fraud of any kind.

From the year 460 B. C. physicians were organized into a corporation or guild, with regulations for the training of physicians, and with an *esprit de corps* and a professional ideal which with slight exceptions can hardly yet be regarded as out of date. The physician must not only be prepared to do what is right himself, but also must be willing to uphold the law and prosecute others who do not uphold the same. He must report violators of

the law and generally coöperate with those in authority to enforce it. Law enforcement is a duty that is incumbent on all of you; whether you believe in it or not the duty rests with you to protect the public from the tenets of those who have no license to practice medicine and impose on a public that is always willing to grab some new novelty in the way of healing or some other faker who advertises his wares without any foundation for the good of the public. Law enforcement is an ideal not a fallacy, and it cannot be enforced without coöperation. The State Board has its corps of investigators and spends time and money to protect the profession, but it cannot find all the violators through its own searching. Complaints are made to the Board by people who are not doctors, more so than by the doctors themselves, so you see the general public is exercised over these violators; and if the public is exercised, you as physicians should be more so, not only to protect your profession but to protect the public. Our fore-fathers said the Constitution was to protect life and property. Property's greatest asset is health. How can it be better protected than by prosecuting those who have no right to encroach on the title of property?

The State Medical Board is working for your benefit and devotes its time for the benefit of the profession, and it must of necessity know where to locate those who traverse the law. in order to prosecute, so I call on you, as citizens who believe in upholding the law, for your full coöperation in law enforcement in this matter in this state, and in doing this, gentlemen, you will not suffer the most honorable of all professions to be debased into a sordid lucre traffic by the fakers outside of this profession who have neither license nor knowledge to practice. Especially is it your most sacred duty to yourselves and your profession to help prosecute these violators; it constitutes an important part of justice, and if coöperation is not forthcoming from you doctors then this and other abuses of your profession will continue and the people will suffer from a lack of enforcement.

For a moment I will call your attention to some classes of fakers we are called upon to



prosecute. I will not mention names but the files are in my office and will corroborate what I cite:

"Dr. L."—in Ocean County—claimed to free the body from toxic poisonings and said it was necessary to create "new pores" in the body. He proceeded with a woman to insert new pores in her body. He had a machine with 26 needles in it and from the woman's shoulders to her heels he placed this machine drilling holes in her body. She had 1000 infections in her body, and subsequently died; and her husband died within 3 hours as the result of the shock.

A man, "Mr. C.", of Bergen County, claimed to have a cure for tuberculosis and he obtained \$10 per bottle for this so-called cure, which a subsequent analysis showed contained only lard, molasses and vinegar; and he accumulated a fortune from sales of this sure cure for tuberculosis.

Another "Mr. G.", of Hudson County, had a sure cure for cancer and diagnosed and treated conditions as cancer, and he even claimed that our investigators had cancer. Analysis showed his medicine was nothing more than plain chocolate in wafers.

"Mrs. W.", of Gloucester, was a practicing midwife without license; no care was taken of the children's eyes after birth; 3 children went blind and 1 mother died as a result of her ignorance.

"Mr. W.", son of a minister of Union County, was an "expert on foot diseases"; he *studied in a correspondence school*, and ruined quite a few people's feet in his ignorance.

Druggists are treating gonorrhea and diseases of that character, and in Hudson County one druggist had blank prescriptions signed by 2 doctors, and he treated patients and gave medicine with doctor's names on the bottles, and these doctors admitted they never saw the patients.

"Mr. J.", of Essex County, practicing chiropractic, was convicted and then started practicing dentistry and was convicted of both violations.

"Mr. W.", of Newark, claimed to be an "expert in stomach diseases" and had quite a practice, and the only thing he gave was an

ordinary cereal in cans, which he said he obtained from Germany.

Certain chiropractors are now trying electric treatments in connection with manipulations by hand, which is a violation of the law as our courts say chiropractors can only manipulate the spine with the hand; there have been several convictions of these men. Osteopaths are doing the same thing, claiming they are also "naturopaths"; and many convictions of these people have been obtained by your state board.

Fake advertising is another evil which is being corrected; both within and without the profession. Fake certificates from other states are also presented to the Board, which call for constant supervision and investigation.

It will be a grave indictment of you men, as physicians, if you fail to coöperate in this, the most serious of crises. I crave for your earnest consideration of these facts, for an influence in quickening of your profession in this matter; in deepening your seriousness and in assisting the State Board to carry out the law of this state.

A very few words more and I will be through. Those words are words of hope. Indeed, if I have said anything that seemed to you to be bitter, it has been in a spirit of friendliness, to help me in a cause I have at heart. I know this cause will conquer in the end for it is an article of faith with me to protect the health of our people of this state from quacks. I know well it is not for me to prescribe the road to success of this undertaking, but faith in my work impels me to speak according to my knowledge, feeble as it may be and rash as the words may sound, for every man who has a cause at heart is bound to act as if it depended on him alone. I am practicing the things I have asked you to do; it is a pleasure to work for you and try in my feeble way to bring results and uphold the dignity of your profession, and to prosecute those who violate the law, and with this all in mind you have asked me to speak to you as a friend. I could do no less than to be open and fearless before you, my friends.

So, in closing, I plead with you to start a system of education among the people of this

state and nation to combat this insidious propaganda of these so-called modern cures and faith healing and other fakes and quackery, to combat the propaganda of those who practice such methods. To strengthen the law of this state so that for a second or third violation of the Medical Act the sentence will not be a fine but imprisonment in jail of not less than a year; as fines will not stop the illegal practice of medicine in New Jersey.

#### DISCUSSION

*Chairman McBride:* I wish to express our appreciation to all the gentlemen who have rendered these very excellent papers. They are now open for discussion.

*Dr. Frank W. Pinneo (Essex):* We are to be congratulated, I believe, on the progress which the government is making in New Jersey, and in having the Assistant Attorney-General enforce, with such an ardent spirit of coöperation, the law, which is so often flagrantly violated. From the way the law is now worded, in spite of the ardor of the enforcing authorities, they often cannot prosecute from lack of the required evidence of specific deeds done *besides* the misuse of the title "Doctor". However, we can help to get this evidence, and with the combined forces always on the alert to the evils, which are well known, the advancement ought to be great. We, in Essex County, where the evil is perhaps more rampant than anywhere else in the state, are willing to coöperate, and we want to say we appreciate the very great help that the Board of Medical Examiners is giving and the marked improvement that has been made in our county.

*Dr. J. Bennett Morrison (Newark):* The address of the Assistant Attorney-General is going to go a long way toward remedying illegal practices in this state. He may not know it, but for a great many years we have been discouraged and handicapped, in prosecution of these cases, by the negligence, if not refusal, of the county legal authorities to help; but if the medical profession can know that from now on, if these cases are reported, they will be brought to justice through the office of the Attorney-General, it will go a long way toward ridding us of illegal practitioners in the state of New Jersey.

*Dr. Charles B. Kelley (Jersey City):* The amount of material that was covered here this afternoon caused me to take enough notes to really produce a paper of my own; however, inasmuch as I am most familiar with the work as outlined in Mr. Peacock's paper, I shall confine my remarks to that paper with the one exception of Commissioner Ellis' statement in regard to Dr. Renner's work at Skillman Village. There is one thing that he has done, and that is to insist upon his medical staff being licensed men. It has been and still is in parts of this state the custom for institutions, state, county and municipal, to have as full-time, paid physicians, for an indefinite number of years, men who never had a license, some of them unable to obtain a license, and your state, county and municipal wards are being treated by physicians who cannot go out and treat the general public. Now, Dr. Renner has been particularly careful in

that respect so that at Skillman there is now, I believe, nobody who is not a licensed physician. Unfortunately, in other institutions there still are; and the way by which these institutions keep these physicians is simply the clause that was put in the law to cover interns; it was never meant to allow physicians to stay in institutions indefinitely. Only recently we issued a license to a doctor, the head of one of our big institutions, who has been the head of that institution for 12 years. He was well entitled to a license, we found out, but he had never secured it, and yet he had been in the meantime, President of his County Medical Society.

In regard to Mr. Peacock's paper, the Medical Practice Act of the State of New Jersey is undoubtedly one of the strongest in the union, and it has become that by the activity of the various Attorneys-General, since enforcement has been placed in the hands of the Attorney-General, a matter of some 10 or 12 years. Prior to that time the County Prosecutor was the one who was supposed to enforce this law. There was no enforcement. When it was placed in the hands of the Attorney-General there was activity, and from my own personal knowledge, the Medical Practice Act has been very largely built up by the activity of Mr. Peacock's predecessor, Mr. Grover C. Richmond, of Camden, who obtained many excellent court decisions, and it has been further strengthened since the work has been in the hands of Mr. Peacock.

The other person in this state who is doing more to enforce the Medical Practice Act than any one other individual is the Inspector of the State Board of Medical Examiners, and I certainly feel that she is well entitled to tribute, not only from me but from the entire profession in the state. Mrs. Frances Wilkinson is a woman who seems particularly adapted to that kind of work, and as Inspector of the Board she is just as vigilant as Mr. Peacock, the prosecuting attorney.

The functioning of the Board of Medical Examiners could be improved. The Board meets only once a month. The secretary is only a part-time man; consequently a large part of the work drifts into the hands of lay people, and the profession of the state is being protected by virtue of the fact that the lay woman who is the chief employee of the Board is extraordinarily capable.

The profession thinks that a report of the violations is all that is necessary, and that it is an easy matter to obtain convictions; and now after hearing from Mr. Peacock I know how much reporting there is going to be done, and if you don't get action I want to let you know why. The primary reason is that a man is always innocent until he is proved guilty, and to prove a violator guilty is a hard job. There are all sorts of investigators and investigations necessary. The Courts have ruled that a given number of treatments must be given. The treatment must be corroborated, the testimony must be corroborated, and it is only right that the judge will give the defendant the benefit of any doubt. In certain types of cases it is utterly impossible to prove the charge. In the cases of alleged abortion it cannot be done as the person upon whom the abortion has been performed will not appear, and certainly you cannot send investigators in for that work. Injections of varicose veins—I wonder how many of the profession who have varicose veins would go and have them treated by quack hypodermic injections of all sorts. Still it is necessary for investigators to be so treated if the case is to be proved. There are innumerable obstacles to the enforcement of the law, and the greatest obstacle of all is the limitation of



funds. We have a very small corps of investigators. Outside of Mrs. Wilkinson, our inspector, we have to depend entirely upon 3 or 4 investigators who only work part time and who receive a very nominal amount of money for services rendered. For every case that is prosecuted the cost is something like \$75 or \$80. At the utmost the Attorney-General will get \$200 back. The average is cut down by virtue of the fact that a certain number go to jail for a day, and by other factors. The general cost of enforcement always shows a deficit at the end of the year, and it was largely in order to obtain funds for maintaining a more strenuous enforcement, such as Mr. Peacock has outlined, that the Board advocated an annual registration fee. Of course, the history of annual registration we all know. We may have annual registration some day, but that is another question that need not be discussed now. However, if you are going to send in a lot more complaints, we will do our best to investigate them. In the meantime, as far as the actual legal end of it is concerned, the state takes care of that wonderfully well by giving us such competent men as Mr. Peacock.

*Dr. Henry O. Reik (Atlantic City):* I appreciate Mr. Peacock's coming here and making a clear statement to us as to what his Department is willing to do. I am very appreciative because I have heard of how ably he is supporting the Medical Practice Act, and is prosecuting offenses against that act. I do want to take exception, however, to one or two things that he said, and ask him to look a little further for some information on this subject. From certain necessary implications from some of his remarks, I gathered that he laid the obligation upon the medical profession to do this prosecuting and informing. I doubt whether that is an obligation that properly belongs to the medical profession, but it is an obligation which the medical profession has accepted almost from the beginning of time. He implied that the medical profession should always give information concerning quacks and charlatans in the state, referred to the lay information received, and implied that we had been negligent in that sort of thing. I doubt if 10% of the information that has come to his Department has been from lay organizations. I am under the impression that 90% of this information *does come* from the profession. I doubt very much if any layman has presented any complaint and information except in the few instances where that layman has been individually "stung" or some intimate friend or relative of his has been seriously defrauded.

He also puts upon us the obligation of educating the public regarding quacks and charlatans. I am sorry he did not hear Dr. Fishbein's lecture last night. What other body than the Medical Society is doing *anything* toward education of the public with regard to quackery and charlatanism? This educational work the medical profession *has been carrying on for a long time*, is carrying on constantly; in contrast to the great public institutions of the country that are constantly aiding the quacks and charlatans. I hope, Mr. Peacock, you will deliver your story to some of those organizations. While we are fighting quackery and charlatanism, and trying to educate the public to understand the falsity of quackery, 90% of the magazines and newspapers in the country are spreading broadcast the advertisements of these very quacks and charlatans that you talk about; and, worse than that, we heard last night the extent to which the radio stations are supporting them.

You have only to tune in tonight on any station you please, and you will probably pick up one or more of those patent medicine talks; certainly you can pick up one any time during daylight hours.

Those are the 2 great "educational institutions" of the country—the newspapers and magazines, and the radio—and they are backing the quacks and charlatans all the time; and so far as I know, the medical profession is the only institution that is carrying on an educational campaign to instruct the public about such dangers.

Mr. Peacock meant well and honestly in what he said, and we all know he has proved himself to be our friend, but I want to set him straight on those points.

*Dr. E. P. Darlington (Burlington):* It seems to me that this State Medical Society should go on record in opposition to the Act that permits our State, County and other Municipal institutions to employ unlicensed practitioners. The inhabitants of those institutions would not be allowed to employ those physicians were they not in the institutions, and a man in an institution should have as good care, or have the same care, as he could employ on the outside. Those physicians cannot have general practice so they ought not to practice on the patient after he goes into an institution.

*Dr. Fred J. Quigley (Hudson):* I thoroughly enjoyed hearing Mr. Peacock's talk, and certainly it is pleasant to know that the State Board has enjoyed and does enjoy such splendid coöperation from the Legal Department of the state.

There is one question that I have in mind, that I would like to have Mr. Peacock's opinion on, and possibly Dr. Kelley's, and that is the matter of offenses against the Medical Practice Act so far as it affects second and third offenders.

I don't know whether Mr. Peacock will agree, but it seems to me that one of the weaknesses is that the penalties for second and third offenders are not sufficient. Dr. Kelley tells us of the tremendous expense entailed in obtaining evidence against these quacks, that for each case it means 5 or 6 treatments before they can obtain a conviction; and after they have obtained convictions there have been quite a number of cases where within a month they are practicing again, and then the state has to go through the same procedure, the offenders receive a slightly higher fine, and then go out again and continue practicing; and the same proposition has to be met again.

I have sometimes wondered whether there was any method by which these quacks, after conviction could be enjoined from practicing again, and if they continue to practice, instead of again being fined, whether appropriate action could not be taken under contempt of court proceedings.

*Mr. Robert Peacock:* No injunction would lie.

*Dr. George N. J. Sommer (Trenton):* I am sure that most of the membership know of the action taken by the Mercer County Medical Society this year in relation to state employees on a full-time and part-time basis with maintenance, to declare that private practice by them after a certain date shall be unethical.

I have arisen to speak on this occasion merely to pay a compliment to the Department of Institutions and Agencies and to its representative, Mr. Ellis, who spoke here today, and to offer thanks for the cordial treatment accorded a Committee from our County Society. This action

caused a great deal of excitement in the county at first, but the Committee, with the aid of the Department of Institutions and Agencies, has been able to adjust the matter. The Department treated us very well, and agreed that our points were well taken, and I presume so far as the state of New Jersey is concerned, this practice will probably be abolished within the time limit set by our county society.

*Dr. John F. Hagerty* (Newark): I would just like to give expression to a thought that occurred to me while listening to all these papers. It is very instructive to learn of the manifold agencies there are in this state concerned with the protection of our lives, the preservation of our health and of our comfort. It would seem as if every detail of our lives was being watched over and guarded by agencies in this state, for which we are all thoroughly appreciative. Yet, in spite of all that, we learn through Mr. Peacock that there are still many people who barter away their lives, their health and their comfort by entrusting their lives, when ill, to irresponsible practitioners. It is hard to understand this, and I felt that possibly if what we have learned this afternoon could be brought home to our people, could be emphasized over and over again to our people, just what the various agencies throughout the state are doing, how much concerned they are with the lives and health of the people of this state, and what they are doing to protect them, it might help a bit in discouraging other people from resorting to the help, such as it is, of these irresponsible practitioners. I think it is a very splendid thing, Mr. President, to realize what is being done by the various agencies throughout the state for the people of this state.

## MALNUTRITION IN CHILDREN; AN ATTEMPT AT STANDARDIZATION OF A DIETARY\*

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Statistics regarding the incidence of malnutrition made by various authorities indicate that about one-third of the children of this nation are nutritionally below par. Wood estimates 15-25% of the school children as being undernourished. Perlman states that in a recent survey conducted throughout the United States there were found 5,000,000 cases of malnutrition in children—almost one-fifth of the entire number of school children in the nation. That as a nation we have been neglectful of our greatest asset—the child—has been more and more recognized in recent years.

\* (Abstract of paper read before the Pediatric Section of the Medical Society of New Jersey, at the Annual Meeting, in Atlantic City, June 12, 1930.)

Roberts expresses her opinion very well when she says: "We must admit that we have little reason as a nation to be conceited over the stock we are producing." She adds: "It is true, moreover, that our standard of nutrition is higher than that of some other countries though poorer than many." Statements such as these make the problem appear worthy of our serious consideration and effort. So important does the problem of child welfare and protection seem to the government that some months ago President Hoover, at a White House Conference, initiated an investigation of the present situation. One of the larger committees was charged and is active with the study of child nutrition.

Much investigation has been done, especially during the last decade, in an attempt to establish a standard dietary for children suffering from malnutrition. We also have confined ourselves to this phase of the problem, but have devised a dietary which is a decided departure from the usual one employed in this condition. This paper is a discussion of an experiment conducted on a group of malnourished children who were put on this special dietary to test its nutritional value.

### RELATION OF DISEASE TO MALNUTRITION

In dealing with malnutrition one must not over-emphasize the importance of diet to the neglect of other factors. Nevertheless, in a considerable proportion of undernourished children, a cause for the nutritional state cannot be detected. It is especially in this type of case that the outstanding method of correcting the condition is the dietary treatment.

While it is not the primary object of this paper to enter into a discussion of the relation between disease and malnutrition, stress, however, must be placed upon the fact that, if a thorough enough study (including painstaking physical examination, laboratory tests of the blood, urine and stools, metabolic rate, ophthalmoscopic examination and radiographs) of the children suffering from malnutrition were made, the great majority would show disease or defect somewhere in the body responsible for the condition. This view of the relationship between disease and malnutrition is borne



out by the difficulty we had in selecting a group of disease-free children suitable for the experiment conducted. We were offered approximately 200 underweight children from which to select a group for our experiment. Some were excluded because x-ray examination of the chest showed active tuberculosis, 4 had a 4 + Wassermann test, some had rheumatic carditis, some were suffering from intestinal parasites, others from obvious endocrine dysfunction, many from badly diseased tonsils, from carious teeth, from nephritis, pyuria, vulvovaginitis, chronic otitis media, tracheobronchial adenopathy and paranasal sinus disease, so that by the time we had examined the entire group there were only 56 children left who we felt reasonably sure were not suffering from any disease or defect and on whom the experiment could be conducted.

#### DEVELOPMENT OF A NEW DIETARY IN MALNUTRITION

During the course of clinical observation an attempt was made to trace back the type diets that yielded the healthiest looking children, and contrariwise, the diets that yielded children in a state of undernutrition. It appeared convincing that those children that were excellent examples of well-nourished individuals were the ones who consume ample quantities of milk, whole grain cereal products, an abundance of fresh vegetables and much fresh fruits, meat not being a prominent article of the diet; whereas those that composed the group of malnourished, consume large quantities of flesh foods and comparatively little milk, little or no whole grain cereal products, fresh fruits and fresh vegetables sparingly. Further thought and observation seemed to verify this impression.

The average dietary of the infant under 2 years of age is one in which flesh foods are entirely omitted, or, if present, are in so small a quantity that little credit can be given to them, and yet malnutrition today is comparatively rare in infants. It is chiefly a condition of older children. This would indicate that the dietary changes made during the transition into childhood are not entirely successful.

Many parents to whom I have spoken emphasized the fact that until 2 years of age their children were pictures of blooming health, but after this period gradually developed into a state of malnutrition. It was elicited that radical changes had taken place in the dietary, flesh foods and other foods were being introduced to the partial or complete exclusion of milk, whole grain cereals, fresh fruits and fresh vegetables.

While many children of the older age groups coming under observation were splendid looking specimens who have been given meat since infancy, in nearly all these cases careful questioning revealed the fact that it was used so sparingly and so infrequently that it could not be responsible for the excellent physical development. Many pediatricists, I am sure, have seen fine examples of physical development in children who have persistently refused to eat meat because of a natural dislike for flesh foods. The vegetarians bring up their children on meatless diets. It has been my privilege to have been able to examine a large group of these children. While hitherto I had considered the vegetarians an erratic group of individuals, repeated observations showed these children to have such splendid posture, firm musculature, high color, excellent teeth, glossy hair, a good layer of subcutaneous fat, bright eyes and a high degree of energy, that I was forced to give the matter of a meatless diet serious consideration and to experiment along this line.

#### DISCUSSION OF EXPERIMENTAL DIETARY

The dietary consisted of about 1 quart of certified milk and of many milk products. Whole grain cereal products were served 3 times a day, fresh vegetables twice a day, both raw and cooked being served, fresh fruits twice a day, freshly ground nuts and large quantities of legumes to keep the protein intake high. Moreover, the legumes are complete proteins, and are a good source of the amino-acids essential for growth. No meat, poultry or fish was used in any form. No animal broths were given. Neither gelatin nor eggs were included. The purpose of omitting eggs was to confine the animal protein of the dietary to milk alone.

There are certain factors which we desire to stress. The diet meets the caloric need, covers the requirements of fat, protein, and carbohydrate, for the age group. It is high in essential mineral content, contains the essential amino-acids, is rich in all the known vitamins, is decidedly prominent in alkaline-ash foods, and embraces all the "protective group" of foods.

By the use of certified milk and the avoidance of meat the diet is obviously low in bacterial content. The reason for using so much whole wheat is because of (1) its ability to build up hemoglobin; (2) its richness in mineral content, and (3) its richness in vitamins. (4) It is well known that a diet of milk and whole wheat cereal with no other addition but a small amount of sodium chloride will support growth of experimental animals through as many as 21 generations, and that the last members of the family will be more vigorous, larger and stronger than the first generations. Experiments performed on animals by Rose, Vahlteich and Bloomfield have proved the value of whole wheat in producing an increase in hemoglobin. Morgan and Barry point out the importance of whole cereal, particularly wheat and rice, as a possible source of the vitamin complex B ( $B + G$ ). It is noteworthy in this connection that in an experiment they conducted on a group of underweight children they were able to show decided increases in weight and height through the addition of wheat germ to the diet.

At the beginning of the experiment an attempt was made to equalize the caloric intake of both groups and weigh the foods, much as is done in diabetic or ketogenic diets. This, however, was found to be highly impracticable. The appetite of the different children varied, and the same child's inclination varied on different days according to its disposition. Furthermore, it was felt that children should be given as much as they wanted, and then after several weeks of observation the average intakes could be weighed and measured. This plan was carried out. The procedure of ordering weighed and measured portions of foods for children is not practical nor possible in daily practice.

All foods used were very fresh, no canned articles of food being employed. No white bread at all was served. The spaghetti used was prepared from whole wheat flour; the rice was unpolished; to the gravies, sauces and soups an autolysed extract of yeast was added, imparting a flavor resembling meat; cakes and puddings were made of whole grain cereal products; the mayonnaise was eggless; no ice-cream was given because of its high bacterial content. Brown sugar and maple sugar were used for the additional mineral and vitamins they provided; only certified milk was served.

Extra care and precautions were taken in selecting and preparing the vegetables. Only very fresh vegetables were used, for their flavor is decidedly better. The vegetables were placed in parchment paper and steamed, because by this method of cooking they retain their entire mineral content and also their flavor. The raw vegetables were always considered a treat by the children. They were made attractive by shredding them extremely fine by machine and this was always done immediately before serving, so that they would not become dried out. The various colors, particularly when the food was served on colored plates, appealed to them.

Because the children had always had meat previously, it became necessary to devise substitutes that resembled meat, both in taste and appearance. This was easily accomplished by serving the foodstuffs as "roasts", "steaks", "croquettes", and "meat balls", covered with tasty sauces, the chief constituent of these substitutes being legumes.

In addition, varied and unusual dishes were devised, as vegetable broths, vegetable stews, cold creamed soups, vegetable potpourri, squash pancakes, buckwheat vegetable mixture, braised vegetables, vegetable turnovers, glacéed vegetables, cakes and cookies made of whole wheat flour, pudding of whole cereal grains combined with nuts, fruit and cream, vegetable gelatin desserts, chocolate pudding made of whole wheat flour instead of corn starch and crullers made of whole wheat flour. The possibilities of substitutes and combinations are both interesting and unlimited.

A large variety of breadstuffs was used—



whole wheat, whole wheat with nuts or raisins, whole wheat muffins, bran muffins, whole wheat rolls of all sorts, rye bread, corn bread, corn muffins and Graham bread.

### SUMMARY

Two groups of underweight children, each consisting of 25 subjects, were selected and matched according to age, height, weight, and sex. One was put on a special dietary (experimental) and the other on a good average American dietary (control), and the progress of the 2 groups was compared at the end of a period of 6 months.

The essentials of the experimental dietary were a quart of certified milk daily, a variety of nuts, whole grain cereal products 3 times a day, fresh fruits and fresh vegetables twice a day, with the exclusion of meat and eggs.

The weight increase showed that the experimental diet proved superior from the standpoint of rapidity as well as of the permanence of its results. The weight increase in the experimental group at the end of the 6 months' period was 32% greater than in the control group. The height increase was 24% greater in the experimental group than in the control group.

The more extensive anthropometric data established the validity of the weight-gain study, while further technical treatment of these data in relation to the arm and calf girth and subcutaneous tissue over biceps, corroborated the superiority of the experimental dietary.

The results show that the experimental dietary proved to be superior for girls to a greater extent than for boys. It is very likely that psychic factors played an important rôle in the production of this sex difference.

The blood studies showed no difference in progress for the 2 groups. The urinary analyses indicated a much lower acidity for the experimental group than for the control group. The psychometric studies and x-ray studies of the bones were not conclusive. The stools of the 2 groups showed a decided contrast in physical appearance, with a diminution in the total number of bacteria in the stools of the experimental group. The nitrogen balance studies indicated a slightly

better retention for the experimental group. The experimental dietary was proved to be rich in vitamin B complex, as indicated by our studies on rats.

The importance of the vitamin B complex content in a child's dietary is stressed. Both diets, as tested on rats, were shown to contain sufficient vitamin B to effect a complete cure of deficiency symptoms with the same rapidity.

### DISCUSSION

*Dr. Arthur Heyman* (Newark): Dr. Rosenberg has given a tremendous amount of thought and energy to the preparation of this excellent paper. Any physician who treats children cannot help but be impressed with the importance of his subject. He needs no statistics to emphasize in his mind the prevalence of malnutrition in children apparently free from physical and mental defects. The diet used by Dr. Rosenberg is not original in itself but is ingeniously conceived in the selection of individual dishes and in their preparation. After carefully analyzing the dietary, one can easily understand exceptional weight-gains in the experimental group. There are so many elements which we know to be highly conducive to good nutrition. Certified milk, which forms a large part of the menu, has long borne an excellent reputation, especially in the city of its birth. We have all had personal experience with its growth producing qualities and appreciate the reasons for its superiority over pasteurized milk.

Dr. Rosenberg mentioned the glossy hair of the experimental children. Dr. Wherry has shown this effect by feeding certified milk to his house-dog, producing a glossy hairy coat, and then undoing his work by changing to pasteurized milk.

The value of whole-grain products is clearly shown by the references in this paper. I should like to ask Dr. Rosenberg how he explains their failure to stimulate hemoglobin production?

Fresh fruits and vegetables so generously supplied, with their rich content of easily available foodstuffs, vitamins and ash, undoubtedly contributed much to the improvement of these children.

Samuel Kugelmass, in the April 1930 number of the American Journal of Diseases of Children, feeding rats a diet rich in base-forming foods, as is Dr. Rosenberg's, demonstrated that it accelerates the rate of growth, development, metabolism and activity.

I am glad to see that Dr. Rosenberg points out in his summary that exclusion of flesh foods plays only a small part in the success of his dietary since, exclusive of meat and its products, the control and experimental diets differ so markedly.

In conclusion, let me congratulate Dr. Rosenberg on his courage in tackling such a difficult study on actual children instead of adopting the easier method of animal experimentation, and on the thoroughness and painstaking exactitudes of this work.

*Dr. F. I. Krauss* (Chatham): I would like to ask Dr. Rosenberg how much milk the children in the control group were given? I am very partial to giving a small portion of meat. I feel that meat once a day is a boost to their vitality, and I like to give them a minimum of a pint of milk a day. Under these control diets, if these children had no

milk or very little milk, by increasing the milk the same results might be gotten. I would like to ask whether Dr. Rosenberg feels that the results are due to an increase of calories by giving more milk, or to an increased vitamin diet?

*Dr. Charles Rosenberg (Closing):* Both groups of children had an equal intake of milk in their dietary and they had about the same amount of calories. I think the thing that did the trick was not merely the exclusion of meat but the fact that we freely used whole-grain products, combined with a quart of milk a day. I do feel, however, that eliminating meat was one of the great factors.

Dr. Heyman asks why it is if all experimentalations show that these products, particularly whole-wheat, build up the hemoglobin, that we do not have any contrasts between the groups. We had some difficulty with the hemoglobinometer during the course of the work and I think that is where the trouble lay. The children on the experimental diet, despite the lack of contrast, had better color than those of the control diet, and their general appearance was better.

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## ESSENTIALS IN INFANT FEEDING\*

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Gradually there has evolved out of the tremendous amount written on the subject of infant feeding, some fairly definite facts and underlying principles, so that it has become much more of a science and less of an art.

The physician confronted with a feeding problem has so many methods of treatment that he is often confused as to which method or food to employ in a given case. This paper is written to aid in determining a definite course in a normal feeding case, with no aim to handle the special or unusual cases which require different forms of treatment. Even in the normal case there are many individualities, as to frequency of feeding, strength of food and quantity of food to be given, and it is not always possible to at once start with the best type of feeding, but at the outset any food must of necessity be an experimental or trial formula, often requiring considerable alteration to suit the individual infant's needs.

The type of infant feeding used, often mars or makes the child's future health. It is not only of importance to have a healthy looking, well-nourished infant, desirable as that may

be, but what is more important is to have an infant supplied with the proper food ingredients in a balanced relation, one to another, so as to produce the best cells and tissues possible, so that not only will he gain and grow well, but, in addition, have the ideal physical and mental developments with the greatest possible resistance to disease. It is a great responsibility when one stops to consider that even the brain power of the future adult, as well as his general physical health and endurance, largely depends on the character of his previous infant feeding and care through childhood.

It is a fact, definitely proved on many occasions, that for the normal baby, good breast milk from a healthy mother, supplies the type of food, both as to quantity and quality, best suited to develop the ideal infant. In the beginning of modern infant feeding, an attempt was made to imitate in cow's milk formulas the exact percentage of fat, carbohydrate and protein found in normal breast milk. These earlier attempts at scientific feeding, while a decided advance over previous methods, were found to be deficient in many respects and have been abandoned. Recently, food for the infant has been regulated more to fulfill the physiologic needs of the child's digestion. As a result of numerous researches in the physiology and chemistry of digestion, new facts have come to light. Without burdening you with all the details of the various and long pieces of research which have led up to the present knowledge of infant feeding, I shall try to state rather briefly the more salient points on which infant feeding depends.

In the normal breast fed child the ingredients are in proper amount and relation one to another for ideal growth; the problem being mainly one of seeing that the infant receives his food in the right quantity, at the right speed and the correct feeding interval, to satisfy all his growth needs. As breast milk reaches the stomach it is coagulated into a fine, soft flocculent mass and the whey or liquid portion quickly separates, and as soon as the stomach contents reach a certain degree of acidity the pyloric sphincter opens and allows the acidulated whey to pass rapidly on into the intestines,

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\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Pediatric Section, Atlantic City, June 12, 1930.)



while the soft curd is more slowly digested, the stomach being emptied in 2 to 2½ hours. The most important part of gastric digestion is in relation to the protein of breast milk, which being largely lact-albumin contains practically no buffer substance. By a buffer substance we mean a substance which is capable of producing a combination with the gastric hydrochloric acid, thus lessening the available free hydrochloric acid in the stomach. The emptying time of the stomach depends on the rapidity with which the gastric contents reach a certain degree of concentration of free hydrochloric acid. As the proteins in breast milk contain practically no buffer substance and during the gastric digestion produce a fine flocculent curd, allowing free access of the gastric juices to all portions of the food, there is very efficient gastric digestion with rapid emptying of the stomach. The thoroughly acidified gastric contents, on reaching the duodenum, further stimulate the intestinal mucosa which, in turn, produces secretin, an activator of biliary and pancreatic secretion, to insure good intestinal digestion.

Of all the constituents in breast milk, the most important is protein, for it is only through protein that new cells are produced; neither fat nor carbohydrate being able to cause growth. Another very important fact in considering the digestion of breast milk protein is that it is made up of a number of component amino-acids which are essential to normal growth. Thus 2 facts stand out prominently: first, breast milk protein, by its lack of buffer and formation of flocculent soft curd, favors both rapid and efficient gastric and intestinal digestion; and, secondly, that the protein, or growth element, of breast milk contains the kind and amount of amino-acids best suited to the infant's growth. In good breast milk mineral salts are found in normal amounts. Antirachitic vitamin D and antiscorbutic vitamin C, however, are deficient and should be supplemented. B vitamin is in small quantities, and it is therefore necessary to give additional B vitamin in some cases.

As a substitute for breast milk, when artificial feeding is necessary, good cow's milk is almost universally chosen. So, let us con-

sider for a moment in what way the protein of cow's milk differs from that of breast milk. Holt and Fales conclusively showed that as the amino-acids in cow's milk protein varied in number and amount from those of breast milk, to obtain the necessary amount of the essential amino-acids of breast milk it was necessary to supply twice the amount of cow's milk protein.

In the digestion of raw cow's milk protein, we find 2 very important differences from that of breast milk, namely, a high buffer substance, and the formation of a firm tough curd in the stomach. When raw cow's milk reaches the stomach a certain amount of free hydrochloric acid combines with the buffer substance, and, as a result, the gastric acidity is lowered and the emptying time of the stomach delayed. The formation of a large, tough, firm curd further slows digestion and delays gastric evacuation.

As the protein is the essential growth element we must determine the protein need of the infant and build our formulas around it. The various food elements, fat, carbohydrates and protein, have their own particular functions to perform, for which they are best suited and are so interrelated that to produce the ideal results they must be in proper balanced relation one to another. The relative amount of fat and protein found in cow's milk is a good one but the carbohydrate should be increased. In ideal digestion, Holt and Fales have shown that about 35% of the calories should come from the fat, 50% from the carbohydrate, and 15% from protein. As, for example, a formula of 3% fat, 7.5% carbohydrate, and 2.8% protein has such a relationship, and gives 21 calories to the ounce, the same as good breast milk. To fulfill the protein needs of an infant, 1.5 gm. cow's milk protein per pound of body weight are required or, the equivalent, the protein contained in 1½ to 1¾ oz. of whole milk per pound of body weight in the entire day's food.

After determining the basic protein requirement it is important to supply the infant with the necessary amount of fluid, namely, 3 oz. per pound of body weight for the first 3 months, 2½ oz. per pound during the next

6 months, and 2 oz. per pound in the last 3 months of the first year. The amount of fluid necessary in 24 hours includes the milk in the formula. It is an easy matter to divide the total quantity in amounts suitable to the infant's gastric capacity relative to its age. The infant's physiologic capacity per feeding can be counted as 2 oz. more than the age estimated in months up to the sixth month, after which no further increase is made, but the formula is supplemented with other more concentrated types of food. The feeding interval is made as long as possible, to give the correct amount at each feeding and use the total 24 hr. fluid. In normal infants, never feed less than 3 hours, and when possible 4 hour intervals.

Having made up our formula with whole milk to satisfy the infant's protein needs, and as in whole milk fat is in a proper balanced relation to the protein, both fat and protein requirements are fulfilled. Then, we add enough carbohydrate to make up 50% of the total calories. The fluid, fat, carbohydrate and protein needs are met, and such an amount of whole milk contains enough mineral salts for all requirements.

Such a formula contains sufficient fat vitamin A, but the C, or antiscorbutic, vitamin is deficient to a varying degree, so this has to be added either as orange juice, lemon juice or strained canned tomato juice. B vitamin may or may not be sufficient, so that recently it has become customary to add such a vitamin either as malted cereal germ, or brewer's yeast extract. Vitamin D is deficient in all milk, so must be added by giving cod-liver oil, newer preparations of rayed egosterol, or ultraviolet light treatment.

Finally, the 24 hours' food for the normal infant should contain from 45 to 55 calories per pound of body weight.

In addition to satisfying all the above food needs the formula should be made as digestible as normal breast milk, or as nearly so as possible. The digestion and assimilation of the food itself require a considerable number of calories at best, so that the more easily digestible we can make our formula, without replacing normal gastric and intestinal func-

tion, the better. Additional calories are thus made available for growth.

Fortunately, there is a means of reducing the buffer substance in cow's milk and altering the character of the curd formation, so that the degree of free hydrochloric acid at the height of digestion and curd digestion approximates very closely that when breast milk is given.

Boiled cow's milk acidulated with proper amount of either acetic, lactic, citric or hydrochloric acid reduces the buffer substance and gives a fine flocculent curd, so that it is digested with about the same ease as breast milk. In varying degrees the same lessening of the buffer and the production of a fine, flocculent curd is also produced by the heating and processing of the protein by boiling, evaporating, or drying of milk, with or without acidulation. This was amply proved by the work of Marriott, Hess, Brennemann and others, and we now have available a method of making the protein element of cow's milk nearly as digestible as the protein of breast milk.

One is often asked as to the advisability of routine feeding of acidulated food for normal infants, who in many cases could handle a raw milk formula with comparative ease. As acidulation of the formula aids greatly in digestion it would seem the logical thing, especially during the first 5 months, when the demands on digestion are great and the organs of digestion immature, to acidulate the formula for the following reasons:

(1) Acidulation causes a fine precipitation of protein, rapidly and easily digested, when prepared from either cold boiled milk or evaporated unsweetened milk; whereas the curd of raw milk is large, tough and slowly digested.

(2) The buffer substance in the protein of acidulated cow's milk is so reduced that the gastric acidity and the emptying time of the stomach approximate very closely that when breast milk is fed. On raw mixtures the buffer causes a very decided slowing of gastric evacuation.

(3) In acidulated food the acid is sufficiently high to inhibit bacterial action preventing fermentation and diarrhea. The formula



keeps well even when refrigeration is poor or the food is carelessly handled.

(4) The gastric contents of acidulated milks are more acid on leaving the stomach than when raw milk is given. This increased acidity accomplishes 3 things: (a) Gives a greater stimulation to the flow of secretin, which in turn causes better biliary and pancreatic secretion and, as a result, better intestinal digestion. (b) The increased acidity helps in the solution and better absorption of calcium and phosphorus. (c) It inhibits bacterial growth in the intestines, of a fermentive type, and permits a higher amount of carbohydrate being fed without gastro-intestinal disturbance.

If one uses organic acids, lactic, citric or acetic, which are quickly broken down to carbon dioxide and water, the acid base equilibrium is not disturbed and an alkaline type of stool is produced, putrefactive in odor and of a slightly constipating type. An acidulated milk supplies a food which physiologically is digested with almost as much ease as breast milk, but does not replace gastric or intestinal function as peptonized food does. As the aim is to produce a food as digestible as breast milk and at the same time supplying all the necessary food ingredients, in a proper balanced relation, acidulated formulas should be advocated for routine feeding.

Kerley, in 1923, used evaporated, unsweetened milk, acidulated by bacterial inoculation, for the treatment of diarrhea. Shortly afterward, Marriott brought out his epoch making article on acidulated milk treated with lactic acid. When Hess and Matzner, in 1924, advocated the use of lemon juice to acidulate milk, I used both cold boiled milk, and unsweetened, evaporated milk acidulated by this means, in preference to either the culture method of Kerley or lactic acid as used by Marriott. The work of Brennemann seems to show that plain, unsweetened, evaporated milk produces a fine flocculent curd, almost as digestible as breast milk, comparing favorably with the unsweetened, evaporated milk acidulated by lactic acid as advocated by Marriott.

I prefer, however, unsweetened, evaporated milk, acidulated by lemon juice, to either plain

unsweetened milk or that acidulated by lactic acid, because:

(1) It affords an easy way of giving an antiscorbutic, which neither of the other methods supplies.

(2) The acidulation produces a better emptying time of the stomach than plain, unsweetened, evaporated milk.

(3) The citric acid in lemon juice inhibits bacterial growth and makes the mixture safe even in hot weather, lessening the liability to diarrhea. Kerley mentions that he was unable to treat diarrhea cases satisfactorily with unsweetened, evaporated milk, no matter how modified, until it was cultured with lactic acid bacilli, after which it was as valuable as protein milk.

(4) The gastric contents being more acid when they reach the intestine, give a better absorption of calcium and phosphorus than when evaporated, unsweetened milk is used without acidulation.

(5) The lemon juice mixture has a less acid taste than the cultured mixtures advocated by Kerley, and is much less troublesome to prepare. It is also less acid to taste than when the lactic acid mixtures of Marriott are used; hence it is taken better and is less liable to cause vomiting.

(6) Lemon juice produces a finer curd, and hence more digestible protein, than either plain, unsweetened, evaporated milk, or evaporated milk acidulated with lactic acid.

In addition to the above facts, unsweetened evaporated milk has certain other advantages over raw milk clearly brought out by Marriott:

(1) It is relatively very cheap.

(2) Percentages are very uniform, being approximately twice the strength of good raw cow's milk (fat 8%, sugar 10%, protein 7%), and is safeguarded by federal inspection.

(3) In certain cases it affords a means of giving very concentrated, easily digested food.

(4) Processing of the protein, due to homogenization and heating, aids in cases of eczema and allergy to cow's milk protein.

(5) It is a nonproprietary food, available anywhere.

(6) Although there is a slight precipitation.

of calcium and phosphorus into insoluble salts, this deficiency is off-set by the fact that these elements are present in 3 times the amount found in breast milk and are dissolved by the digestive juices. It requires less acidulation to maintain a good gastric acidity, with evaporated unsweetened milk, than when boiled milk is used.

(7) Fat being homogenized is thereby made into a fine emulsion, more easily digested.

As a routine in normal infants, I am accustomed to place the baby on a formula a little below his caloric needs, as it is important to give a food within the infant's digestive ability, but to maintain his full fluid requirements. The strength of food is increased as rapidly as the digestion will tolerate, up to the infant's protein requirements, and enough carbohydrate added to balance the food so that it gives 21 calories to the ounce, as in good breast milk. Enough of the food is given to supply 45 to 55 calories per pound. In normal babies I prefer food giving 21 calories to the ounce, as there is less danger of protein intolerance than when whole undiluted milk and sugar is used, with a caloric value of 30 calories to the ounce. Once having obtained such a strength formula, simply give the child an increased quantity of the same strength throughout the first year. To supply food almost as digestible as breast milk, and of the same caloric value, is as near as one can approach breast feeding with a formula. In normal cases all the calories necessary can be supplied from such a formula, as in the case with breast milk, up to the sixth month, when other more concentrated foods, such as vegetables, cereals and egg-yolk, should be added to the diet.

Starting infants with their fluid needs and enough milk to give 1.75% to 2.3% protein, with additional carbohydrate, this is rapidly increased, depending on the gain and digestion of the infant, to a formula of 3% fat, 7.5% carbohydrate, and 2.8% protein, which will be found, if given in sufficient quantity, to fulfill the child's protein needs, and all the ingredients will be in a balanced relation. For every 2½ oz. evaporated milk, 1 teaspoonful of strained lemon juice is added, and the food

should not be heated above 100°F. when given to the baby, otherwise there will be undue curdling.

Very satisfactory results were obtained in 400 children fed evaporated milk acidulated with lemon juice, and boiled whole milk acidulated with lemon juice. The records from the Dispensary of the Children's Hospital of Philadelphia and from my private cases were used. On evaporated, unsweetened milk and lemon juice the average gain was 6.1 oz. per week or .87 oz. per day, and the average length of time on the food was 6¼ months. The average age at which the food was begun was 8 weeks. On boiled whole milk and lemon juice the average gain was 6 oz. per week or .86 oz. per day, for an average duration of 6¼ months. The average age when this formula was started was 11 weeks.

The above figures show very satisfactory gains when one considers that the average start of these cases was not until the second or third month, and extended over an average period of 6¼ months, bringing the feeding well into the second half of the first year, when the normal rate of gain diminishes.

#### SUMMARY

(1) Normal infants can be fed very satisfactorily on boiled whole milk or unsweetened, evaporated milk, acidulated with lemon juice.

(2) Evaporated, unsweetened milk is somewhat more satisfactory when acidulated with lemon juice than other formulas.

(3) Regulate the formula to give the infant's fluid needs, then the protein requirements and enough carbohydrate to balance the food, giving 21 calories to the ounce.

(4) Mixture of 3% fat, 7.5% carbohydrate, and 2.8% protein, acidulated with lemon juice and made up with unsweetened, evaporated milk gives such a formula.

(5) This feeding, giving 21 calories to the ounce, as breast milk, shows in a review of 400 cases very satisfactory results, and is preferred to a stronger formula of higher calories.

#### DISCUSSION

*Dr. F. I. Krauss (Chatham):* I am very much interested in Dr. Nicholson's paper. When Dr. Marriott first published his results on lactic acid milk I was very partial to the use of it; and I have been



using practically the same type of lemon juice milk as Dr. Nicholson has for the past year. My routine in most cases is to use the certified raw milk and karo sugar. In the more difficult feeding cases I use an evaporated milk in the same way and my results have certainly been as good as with the lactic acid milk; the mothers have less difficulty in making it up and I think the children take it more readily. Children who have a tendency to regurgitate retain the lemon milk better than the lactic acid milk. I have been disappointed with the use of lactic acid milk in vomiting babies. Unless thickened with some flour, they vomit it quite easily.

I should like to ask Dr. Nicholson why he uses boiled milk and not certified raw milk in making the lemon juice formula?

*Dr. Charles Rosenberg* (Newark): Dr. Nicholson did not say anything about the bacterial content of the milk. To my mind that has always been an important phase of the question. A large proportion of evaporated milk has a high bacterial content and it has always seemed to me that the bacteria of milk after being destroyed are still able to produce gastro-intestinal disturbances. It is for this reason that I am opposed to both evaporated milk and pasteurized milk.

I would ask Dr. Nicholson what he does about selecting milk of low bacterial content for use in infant feeding?

*Dr. Percival Nicholson* (Closing): It makes very little difference whether you use raw or evaporated, unsweetened milk, if there is thorough boiling of the raw milk. If milk is boiled 10-12 minutes it will be much better than when just brought to a boil. After boiling, the milk should be thoroughly cooled before acidulation. If large curds form beat with a Dover egg beater in order to break the curd up. In Eweiss milk the Germans advocated boiling after making the mixture and then beating until smooth. When first used in the Children's Hospital the nurse, instead of beating it at the end of the process, filtered out the curd of the milk and gave the whey to the children, with disastrous results. It is very important to see that these mixtures are not heated too hot, when being fed to the infant. If you boil the milk and cool it before acidulation, you get very much better results than when raw milk is acidulated without boiling. I have had no pustular rashes in any of the infants fed evaporated, unsweetened milk.

In regard to the bacterial content of evaporated, unsweetened milk, the milk in sealed cans is sterilized at a temperature of 240°, so that there are not even any spore-bearing organisms left. There is no danger of any kind of contamination. While it is true that some of this milk may not have been 100% pure, companies usually get their milk where they are close to the source of supply and have very satisfactory means of producing it. I have not had any trouble with gastro-intestinal disturbances, but in diarrheal cases most of these children will do well on acidulated evaporated milk.

So far as the bacterial toxins are concerned, I think there may be some present even when the milk is sterile, but from a practical standpoint I have had no bad results whatsoever from them.

## DIET IN ECZEMA OF INFANTS\*

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My reasons for presenting this paper on the relationship between diet and the eczema of infancy are, first, that eczema is one of the most common and unsatisfactory conditions we have to treat, causing much embarrassment both to the doctor and parent, and secondly, the relative value of dietetic and local treatment offers opportunities for interesting discussion. I wish to present the results which may be obtained by diet.

To estimate the value of any treatment in a condition which often has abrupt cyclic variations, and which tends to spontaneous cure, is difficult and may be erroneous. We are faced with a problem on which the physician's reputation is often at stake; how frequent is the history of patient being taken from one physician to another, the final result being accredited to some patented medicine.

Our present knowledge would indicate that most cases of eczema in infancy are either of an allergic or anaphylactic nature. Cutaneous protein tests prove this in many cases. There are a considerable number in which tests are either temporarily or permanently negative, but which are proved by clinical treatment to come under this class. Other cases are associated with some difficulty in the metabolism of fat or carbohydrate, or possibly mineral salts. A combination of any of these causes increases the difficulty. Associated with metabolic disorders is some individual hypersensitiveness of the skin. Eczema cannot, from an etiologic view, be considered alone but is grouped with all the other types of metabolic imbalance. In this discussion we will assume this as our background, and consider the results of our clinical experience from a dietetic standpoint alone. Those cases of eczema which are of external origin are excluded; this applies especially to seborrhea with which

\*(Read at the 164th Annual Meeting of the Medical Society of New Jersey, Pediatric Section, June 12, 1930.)

eczema is frequently confused. A few cases will indicate the scope of this paper.

*Case 1.* In January 1921, S. T. aged 2 months, weight 9 lb. 5 oz., developed an acute eczema of the face while on a diet of dryco and dextrimaltose. He improved on skimmed milk and dextrimaltose, became worse on the least addition of cream, became even more irritated on skimmed milk and wheat flour, and again on malted milk. In April 1921, skin tests showed a marked sensitiveness to cow's milk and egg. Mother was advised to continue skimmed milk. Goat's milk was tried without success. When 7 months old, he weighed 13 lb. 2 oz., and was covered with a diffuse erythematous, squamous rash. Milk was discontinued, and a soup mixture made of dextrimaltose, farina, granum and dried peas, which contain 25% by weight of protein, in conjunction with cod-liver oil and orange juice, was fed according to caloric requirements. Fresh vegetables were also given. In 4 days the body was practically clear, and in 2 weeks the entire eczema had almost disappeared, except for a little dryness of the face and scalp. This disappeared after 1 month. One month later 1 oz. of milk was given and the eczema broke out again, but disappeared when milk was withdrawn. Until over 2 years of age eczema would appear whenever milk was given.

*Case 2.* Poppere, Doris A., born August 13, 1929, weight 6 lb. 10 oz., was nursed 1 month and then put on a milk and dextrimaltose mixture. Began to have colic, and entire body became covered with a fine papular rash. Father had eczema until 2 years old; 1 older child had eczema of face until 1 year of age, and vomits any egg preparation.

Oct. 9, 1929. Aged 2 months. Wt. 9 lb. 9 oz. Acute generalized eczema of entire body. Diet: Dryco and barley.

Nov. 8, 1929. Aged 3 months. Eczema worse. Given soy bean flour, olive oil, and barley.

Feb. 28, 1930. Not improved. Wt. 14 lb. 5 oz. Skimmed milk and barley cooked 6 hr.

March 14, 1930. Aged 7 months. Very much worse. Soy bean flour, butter, vegetables, cod-liver oil.

March 22, 1930. Eczema gone except on face and shoulders.

April 9, 1930. Slight return of eczema.

May 10, 1930. Aged 9 months. Wt. 15 lb. 6 oz.; 2 teeth; few areas of induration on arms and legs; no itching.

#### Skin Tests:

Egg Yolk + + + +

Oatmeal—0

Casein +

Barley + +

Milk +

Wheat + + + +

Diet: Soy bean flour, dextrimaltose, rice, dried-pea mush, vegetables, orange juice and cod-liver oil.

Allergic eczema cured by omitting causative proteins.

*Case 3.* Audrey Grampp, born Sept. 12, 1929, weight 7½ lb. Nursing.

Oct. 19, 1929. Aged 5 weeks. Wt. 9 lb. 7 oz. Rash on head, face, hands since 3 weeks of age. Father has had eczema since childhood. Mother told to omit eggs, milk, wheat, potato from diet. Locally, bran baths, cold cream, and 2% resorcin on scalp.

Dec. 28, 1929. Wt. 12 lb. 10 oz. Eczema extensive over whole body and face.

Feb. 14, 1930. Wt. 14 lb. 2 oz. No improvement. Nursing discontinued. Mead Johnson's soy bean, barley, and olive oil (Sobee) started, together with orange juice, vegetable pulp and oatmeal.

March 4, 1930. Wt. 15 lb. 2 oz. Moist eczema of face and body worse. Began skimmed milk and barley cooked 6 hr.

March 7, 1930. Eczema worst. Omitted barley and began rice.

March 21, 1930. Improved. Wt. 15 lb. 3 oz. Vegetables, cod-liver oil, olive oil and tomato juice started again.

Skin tests on abdomen: Milk + +; Oatmeal +; Wheat +; Lamb +; Barley + + +; Egg + +; Egg Yolk 0.

April 2, 1930. Wt. 16 lb. 1 oz.; body clear; slight scaling and itching of face April 25, 1930. Egg yolk added to formula.

May 20, 1930. Aged 8 months. Wt. 17 lb. 2 oz.; skin clear; slight itching. Diet: Whole milk cooked 6 hr.



Allergic eczema cured by prolonged boiling of skimmed milk.

None of these cases developed rickets, scurvy or any deficiency disease; they were underweight but full of energy; they teathed normally.

It is most important to obtain the parent's coöperation. They must be made to understand that eczema is both a state of abnormal sensitivity of the skin, and of abnormal reactions to food, with which the infant was probably born; that it may be most obstinate to cure or to relieve; that it may persist throughout the first or even the second year of life; that it is not permanently disfiguring; it may not be detrimental to the health; tends to spontaneous cure after 2 years; and that, most important of all, we must consider primarily the general development of the infant, and whatever we do in the modification of diet must have this as a basis. Unless we explain these factors we will soon lose our patient to another physician.

Among nurslings a large percentage of eczemas are due to allergy to foreign proteins to which the mother herself is not sensitive. Dr. O'Keefe states that when the offending protein is removed from the mother's diet, cure or improvement in more than half the cases follows. I recently saw a child, 5 weeks old, where omitting wheat from the mother's diet cleared up the condition immediately, with a recurrence when wheat was added again. If the nursling is sensitive to cow's milk or egg, removing these from the mother's diet will often help. The supply of the mother's milk can be kept up by other foods. It is wise to omit from the mother's diet any food to which the infant gives a positive reaction. However, as we do not always get a positive reaction to the offending protein we must consider our clinical judgment as of equal value with skin tests. Eczema may be a general protein sensitization or a hypersensitivity to fat or carbohydrate metabolism.

*Case 4.* Typical of eczema in a nursling. Born Nov. 4, 1929, weighing 9 lb. 10 oz. Seen first on Jan. 21, 1930, aged 11 weeks, wt. 14 lb. 11 oz. Nursing 8 times in 24 hours; bowels constipated; regurgitates; past 6 weeks

itching rash on face, head, and back. The mother is stout; had an acute eczema before the baby was born. The baby has an acute erythematous eczema of the face and body with crusts in the scalp and on the cheeks.

Tests: Mother, cow's milk + +; oatmeal + +. Baby, human milk 0; cow's milk 0.

Treatment: Mother's diet to consist of fruits, vegetables, soups and nuts and to take soda bicarbonate 31, b. i. d. Local treatment for the infant—calomine lotion with cold cream. The eczema cleared up in 1 month. This infant was probably sensitive to overfeeding with too rich milk. Many nurslings with eczema are overfed; they are usually overweight. In such cases lengthening of intervals between feedings, reducing length of nursing period, and supplying water, plain or alkaline, is of benefit. Many nursing mothers drink too much milk or eat too much carbohydrate; a more liberal use of fruits and vegetables, with less milk and no food between meals, should be tried. Skin tests on the mother are of no practical value. If these various measures fail, then one can consider artificial feeding.

Nursing infants sometimes do better when nursing is discontinued. Whether or not to continue nursing is a very difficult question. If the infant is near the age when bottle feeding would have to be started soon, it is rational to begin cautiously. If the eczema is aggravated, one can still fall back on breast feeding a little longer. I think the very young infant should be breast-fed, with the mother's diet adjusted, and with the use of local soothing applications. The limitations in the diet of a very young infant are too great to permit of much experimentation without danger to the vitality.

In the bottle fed baby a detailed history is very important. We usually find that the eczema started a short time after cow's milk was begun. Then arises the question whether the fat, carbohydrate or protein is at fault, or whether all these may play some part; usually it is the protein. Case No. 1 illustrated this. The eczema appeared on a diet of dryco and dextrimaltose; it improved on skimmed milk and maltose, showing an idiosyncrasy to-

ward fat. The skin tests showed a marked reaction to cow's milk protein. Thus, in this case, these 2 factors had to be considered. The mother was most anxious to get rid of the eczema; her entire attention was focused on it. One of our best pediatricians advised her to continue skimmed milk with the dictum that the protein of cow's milk was absolutely essential to the baby's growth. With considerable hesitation I took the child off milk and made up an artificial milk, obtaining protein from dried peas. The results were immediate. This was my first experience in feeding a young infant permanently without milk.

For these cases of milk protein sensitization, an artificial milk using soy bean flour as source of the amino-acid protein, has been reported recently. Soy bean is rich in amino-acid. Drs. Hill and Stuart, of Boston, have reported gratifying results in a series of cases. Soy bean contains 40% protein and 20% fat, and according to Osborne and Mendel contains an adequate supply of both fat soluble A and water soluble B vitamins. Dr. Schloss reported the use of soy bean protein in 1920; 6 cases of milk protein eczema put on a diet of lactose, mineral salts, washed butter and soy bean protein, and eczema practically disappeared in 3 days; the mixture caused vomiting and diarrhea in 4 cases.

Since soy bean flour has been put up in combination with olive oil and barley flour for commercial distribution, I have used it in 6 cases; 3 were cured, 2 were improved, and 1 unimproved. A few cases in which I wished to use it either refused the food in sufficient amount to maintain nutrition or developed diarrhea. Three cases which made partial improvement gave a reaction to barley, and did not clear up until the pure soy bean flour was used. I am indebted to the Mead Johnson Company for a supply of pure soy bean flour for these cases. The preparation now put up by them should be adequate in most cases of milk allergy, as it is only the very exceptional case which will be sensitive to both milk and barley. If further clinical experience shows that infants will thrive on this soy bean diet, it will furnish a valuable addition in our treatment of milk allergy.

The importance of keeping up nutrition must be strongly emphasized. If these infants lose weight they lose vitality very quickly. They are particularly sensitive to skin infections, especially of the face with secondary cervical adenitis, and to catarrhal infections of the nasopharynx and bronchial tract. They lapse very quickly into a dangerous state of infection or malnutrition.

As omitting milk from the infant's diet is an uncertain and possibly dangerous procedure, methods of modifying milk protein must be considered. First, a reduction of protein to the minimum needs, according to age and weight, should be undertaken. Schloss states that lactalbumen is the most active protein; in which case, feeding a high casein milk may be of some value. Dr. Kerley told me that he uses it in cases where he is not getting the results which he desires with the prolonged boiling of skimmed milk. Several of my patients are taking casein satisfactorily. Protein can be modified by either drying the milk or by prolonged boiling, especially with a cereal flour. Complete or partial drying, as in powdered milk and evaporated milk, helps many cases. Kerley believes in boiling the milk in some cases 6 hours. He uses skimmed milk boiled with rice for from 3 to 6 hours. The prolonged heat changes the protein. Rice is used in preference to barley because fewer infants are sensitive to rice than to any other grain. Kerley stresses the importance of prolonged heating. We frequently hear the history that the milk was boiled a few minutes sometimes for an hour, without results. There are a number of mild cases that are cured this way, just as many are cured by the heat changes produced by drying milk; severe cases, however, need prolonged boiling of the milk. There are certainly many cases of milk allergy which do well when the protein is modified by one of these methods. I have not found acidified milk of any particular value in eczema unless there is an associated enterocolitis; when improvement occurs in these cases it is doubtful if the eczema is a true allergy.

Protein eczemas seem to be cyclic. It is remarkable how an acute condition will subside



and hardly be noticeable in 24 hours, then reappear suddenly without any change in the diet whatever. The skin tests also show this tendency, so that a negative test does not necessarily rule out a food. A test negative at one time may be positive at another. On account of this, many cases should be diagnosed by the history, and treated accordingly if tests cannot be made. I, personally, rely more on the history than I do on the skin reactions, for we know that these are only positive in 60-80% of cases. Other cases of allergy such as those due to egg, wheat, potato, orange juice, beef, lamb, are easily amenable to the omission of these foods from the diet. Next to milk protein, egg albumen and wheat are the most common proteins causing eczema. Eczema in infants in the second year and in young children respond very satisfactorily to the omissions of the causative proteins. The eczemas are usually small areas of a chronic type, which are not subject to the severe itching and infection which complicate with babies under one year of age. The opportunities to vary the diet are much greater without danger of under-nutrition or vitamin deficiency.

**Overfeeding with fats or carbohydrates:** Some infants cannot tolerate any milk fat whatever, and must be given a centrifuged skimmed milk, and their fats supplied either by olive oil or cod-liver oil. White found in the stools an excess of fats in the moist type of eczema, and an excess of starches in the dry type. I find it difficult to form any opinion from the appearance of the eczema whether the carbohydrate or the fat is at fault; clinically, I have found the fat usually the important factor, and next in importance to milk proteins. If the skin tests are negative or cannot be done, and an analysis of the history and diet give the impression that the infant is not metabolizing fat, it is a simple matter to try skimmed milk for a few weeks. Boiling the milk, as mentioned before, will also help. Naturally, reduction in either fat or carbohydrate means an increase in the other, if sufficient calories are to be given. These children have what Czerny calls the exudative diathesis. The balance in diet is very sensitive. When feeding carbohydrates, it is

usually wise to use the cereal flours cooked a long time rather than any of the pure sugars. Rice is probably the safest of all as there are fewer infants sensitive to rice than to wheat, oatmeal, or barley.

As soon as possible, cereals, vegetables and fruits should be added to help supply caloric requirements. The more varied the diet from day to day, the less likely is the eczema to become severe. Here, also, prolonged cooking is of assistance. So many of these eczema babies have colic that careful preparation of the food is essential, the colic being another evidence of sensitivity.

Malnutrition is a common cause of eczema; mostly of the seborrheic type. The mild cases are simple seborrheas of the scalp, and the more severe are dry, indurated, scaly, or fissured areas, especially on the outer aspects of the arms and legs. These cases respond quickly to general improvement in the infant's nutrition; the easiest cases to cure by diet. They must be differentiated from myxedema, with which they are sometimes confused, as thyroid medication is not indicated.

I have not found constipation an etiologic factor in my cases; the condition of the skin does not seem to depend upon it. Constipation is often present, but not more frequently than in the large number of bottle-fed infants. One does notice an improvement sometimes after an attack of diarrhea, which might indicate some relation between eczema and constipation; but I have not seen that giving laxatives or laxative foods has helped. This idea is at variance with the opinions of others who lay stress on the necessity of 2 or more free movements daily.

The local treatment of eczemas of dietetic origin is directed to: first, protection from trauma; second, cure of infection; and third, relief of the burning and itching. Those which respond most rapidly to diet are the dry type with very little itching. If the infant is allowed to scratch an infected area, this alone will keep up the dermatitis indefinitely. The burning sensation is the last symptom to disappear and the skin must be protected during this length of time. A few minutes rubbing will undo the work of days. Most of our local

treatment fails because it is not persisted in thoroughly. When once clear, the skin will remain well or improved so long as the diet is carefully adjusted and the hypersensitive skin protected. In the majority of cases the local treatment is not as important as the dietetic treatment; the difference between allergic eczema and dermatitis of other origins being that an allergic eczema cannot be cured or kept cured unless the allergic factor is modified or removed.

### CONCLUSION

In considering diet in infantile eczema, the causes to be considered are milk or other protein allergy, overfeeding both in the nursing and bottle-fed, fat or carbohydrate imbalance in the diet of the individual, and malnutrition.

The most difficult cases are those due to milk protein allergy. There is no universal substitute for milk. Some infants can be made to thrive without milk, but the danger of under-nutrition is too imminent to permit this therapy except in carefully supervised cases. The protein of the soy bean is rich in amino-acid, and apparently can replace the protein of milk in early infancy. Some infants who can assimilate this protein, gain in weight and energy; others suffer in vitality.

Mild cases of milk protein allergy are helped by prolonged boiling or drying the milk. The milk must be boiled from 3 to 6 hours; success or failure often depends on this point. This is the most conservative and safest way to treat milk protein cases. It is wise to be satisfied with the improvement obtained when an absolute cure does not occur.

Eczemas due to fat or carbohydrate imbalance respond satisfactorily to diet modification.

Eczemas due to malnutrition respond quickly to the general improvement in tissue turgor.

Diet alone will clear up many cases if trauma is prevented and infection removed. Allergic cases will relapse if the diet is neglected.

Most allergic eczemas disappear spontaneously by the end of the second year.

The welfare of the infant must not be sacrificed for the local condition; and any modified diet must be balanced sufficiently to maintain health and promote growth.

### DISCUSSION

*Dr. Arthur Stern (Elizabeth):* Dr. Krauss was kind enough to let me have an advance copy of his paper on a subject which has been of extreme interest to all of us and as it deals mostly with the treatment, I must confess that his part has been to me in my practice full of pleasure and disappointment. Pleasure, when by removal of the child from the breast to artificial food, the eczema disappeared, never to return; disappointment, if after all cutaneous tests and changes of the food according to reactions obtained, the results are negative.

Dr. Krauss states that our present knowledge would indicate that most cases of eczema are either of an allergic or anaphylactic nature. I thought once that I was convinced of this but there are other factors which play an important part in the appearance and disappearance of the eczematous eruptions. Just let me mention one case to show how hard it is to understand the underlying condition.

Baby W., 3 years old, had slight eczema when breast-fed. The child was then tested and reacted positive on peas, white potatoes, wheat, tomatoes; and negative on cow's milk. It was then put on many different milk formulas, with the result that the eczema became much worse. While potatoes, wheat and tomatoes did not increase its severity, peas caused an enormous, edematous swelling of the lips but did not affect the eczematous areas.

At random let me recite from Finkelstein the following observations in his text-book on Diseases of the Nursling, page 797: "I removed a large number of eczema children into a room where all the windows were covered with red paper, so that the spectral colors on the other side of green could not penetrate, and left them there for several weeks. Mild cases were cured within a few days. After they had been put back into the ward, the eczema reappeared. Severe cases were not influenced whatsoever."

Furthermore, if the eczema would be due exclusively to allergic or anaphylactic conditions, there would be no reason why we see (and most all authors differentiate between these points), the 2 types, namely, the facial form, mostly in older nurslings, and the universal form, the *eczema simplex et intertriginosum*, in older children.

Another observation made by Samberger is interesting. He found in the eczematous crusts a ferment similar to trypsin and as the reaction of the crusts and their serum was alkaline, he tried an acid salve consisting of acetic acid and lanolin, which is said to have acted remarkably well in his cases. Klingmueller then introduced the acid tar baths into the treatment of general eczema and in one of the large hospitals of Europe they have been in use for several years. The patients are bathed for 10 minutes and then dried and powdered. The results are reported to be very good.

If we assume that eczema, asthma, urticaria and hay-fever belong to the allergic group of diseases, we still cannot understand why in some persons their occupation produces localized eczematous conditions as we see them in plasterers, bakers, gasoline workers, furriers, and also eczema in diabetics, gouty people, and so on. I have seen a boy



who had a lip eczema which had been treated by the foremost dermatologists and it was very obstinate. The other part of his body was free. Changes in diet had no influence whatsoever. I have also seen a diabetic child after a few years of insulin treatment develop a dry eczema. The rash disappearance of an eczema during an acute infection or even during the weeks of the healing of a fractured leg, gives us food for thought.

So, after all, there must be a peculiar condition of the skin itself which, as the dermatologist Bering, in a recent paper on "Poor Results in the Treatment of Eczema" emphasizes, is the cause of eczema. In order to develop an eczema, he says, 2 things are necessary, the eczematous irritation and the peculiar condition of the skin. He mentions the following experiment: Small pieces of gauze soaked in different test solutions are put on healthy skin, then covered with oilskin and adhesive plaster; after 1 or 2 days the degree of irritation is controlled. Several persons who had eczema showed a very sensitive skin, but in several others, who never had a skin eruption, the same degree of irritation was found. These latter may be potentially eczematous and will get eczema when the special irritation will attack the perfectly healthy skin.

But with all these newer ideas I have very little to offer in connection with Dr. Krauss' paper, which is excellent and timely, nor with his dealings with eczema which in my private practice are similar to the treatment described in the paper. The few thoughts mentioned in this discussion have come to me during the treatment of some of the obstinate cases but as the etiologic factor is hard to define in many other diseases, this also holds good for the treatment of eczema at the present time.

Bering says: "The physician who follows the principle to remove the cause of the disease, if such is known, and then treats carefully and systematically will have the best results, surely, in the future treatment of eczemas in childhood."

*Dr. F. C. Johnson* (New Brunswick): I would like to ask whether any one has had experience with cases which have been determined to be sensitive to arsenic?

## ECZEMA IN INFANCY, FROM THE DERMATOLOGIST'S STANDPOINT\*

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Eczema, as it occurs in infancy, does not differ from its manifestations in adult life; i.e. a dermatitis, of varying intensity of inflammation, appearing as erythematous, vesicular, papular, or pustular lesions; or as any combination of these. The most recent conception of eczema is that it is a hypersensitivity of the skin to some irritant. Instead of consider-

ing eczema as a clinical entity it is best to regard it as an inflammatory reaction in which 3 clinical types can be observed.

First, are cases considered under acute dermatitis, in which the skin is sensitized mainly to known local causes, and which quickly respond when irritants are removed. Another group can be regarded as allergic in character. In these cases we will generally find some form of protein, to which the patient is sensitized, giving rise to repeated attacks throughout the lifetime of the individual; this type is commonly associated with asthma and hay-fever. The third group, and by far the most common in early life, is seborrheic dermatitis. Here we have a classic progression of clinical signs, by which we can place it definitely as an entity, varying in intensity according to the peculiar predisposition of the individual. We have therefore in eczema a dermatitis where many causative factors will have to be considered but by grouping, as above outlined, we can greatly simplify our efforts. In group 1, local causes can easily be established in most cases; group 2 may offer considerable difficulty, but we are getting into a better position, in our methods of isolating causative allergic factors; group 3 cases have a well established clinical entity, and in looking at the subject from the standpoint of early infancy, we find this type so frequently that from a therapeutic viewpoint it occupies the most important position, constituting by far the majority of our cases. In the etiology of eczema today, we are mostly concerned with conditions that lead to skin sensitivity.

Under local or exciting causes, we have to consider all forms of irritation applied to the skin of a susceptible individual. This includes mechanical factors, such as friction of clothing, scratching, simple pruritus and parasites; thermal agencies, such as cold, heat, therapeutic lamps, acting rays of the sun and therapeutic lights; chemical irritants like soap, saliva, nasal discharge, urine and feces. While there is a diversity of opinion regarding microorganisms, we feel they play an important part in the causation of this disease and are entirely responsible for the group 3 cases. In this type, experiments have proved the dis-

\* (Read at the 164th Annual Meeting of the Medical Society of New Jersey, Pediatric Section, June 12, 1930.)

ease has been reproduced by inoculation of pure culture of the spore of *Malassez*, and Elliott and Merrill produced the disease with a diplococcus and a bacillus, and recovered and cultivated the microorganisms. Further, Bockhart has advanced the theory that the *Staphylococcus albus* may become active in the follicles, producing toxins, and by diffusion of these products in the epidermis cause eczema.

Under internal or predisposing causes, nutritional and digestive disturbances are mainly responsible. A majority of patients in this group have been overfed, while others will show excessive fats or starch in the stools. In prolonged cases, a sensitivity peculiar to the individual constitutes the important factor, and this may be hereditary or acquired, transitory or permanent. In the hereditary type we usually find a 'congenital functional defect. The skin of these individuals is abnormally dry and represents a mild type of ichthyosis, to which the term xerodermia has been applied. Cases are presented, however, in which this feature is hardly evident, and only careful inspection will reveal the abnormal dryness of the skin. These people are prone to develop eczema during the winter months, when the skin function of stabilizing temperature is at its maximum. In the acquired type the skin may become sensitized by a single application, or by repeated exposure to an irritant, and continue to develop eczema from very mild and dissimilar irritants. Other internal causative factors are various conditions responsible for an elevation of temperature, such as intestinal disturbances, the various toxemias and dentition.

In treatment, our first endeavor is proper feeding of the patient, and this is referred to the pediatrician or family physician with general instructions: if overfed, to modify the amount of intake, and if a nursing baby, the suggestion is made to reduce the amount of intake by giving a small quantity of cereal water before each nursing. In cases that are normal in weight, an examination of the feces is advised and, if unsuccessful in determining an abnormal digestion, further tests for protein reactions should be tried. If milk is found responsible, an attempt at desensitization is

advised by giving milk in small amounts and gradually increasing the quantity as the patient's tolerance is increased. This procedure has been found successful in many cases. After the nursing period we are usually in a better therapeutic position, and in cases that are very resistant we can substitute a diet free from allergic articles, or a diet in which they can be brought down to a point of tolerance. Among the foods most frequently at fault in producing a dermatitis we would place oranges, eggs, butter-fat, milk and cane sugar.

Next, the character of the skin must be taken into consideration: if abnormally dry, instructions as to a diet rich in fats, or cod-liver oil is advised during the winter months; and the patient protected against exposure to severe winds or drafts. Cases of this type are very frequently misjudged, being treated with all kinds of stimulating ointments which increase the irritation and add to discomfort of the patient, while the use of mild soothing remedies will succeed in affording relief.

We now come to the most common causative factor, namely, seborrheic dermatitis, which is a parasitic infection. While errors of diet and skin hypersensitivity play an important part in seborrheic dermatitis, in most cases we succeed by local treatment exclusively. The clinical symptoms of this condition are present in the majority of cases of so-called infantile eczema, and as it may continue throughout the life of the individual, its recognition in infancy becomes an important feature, as proper treatment at such time frequently results in its termination.

In the local treatment of infantile eczema we are dealing with an acute dermatitis, and although remissions in intensity are the rule, the end-results of infiltration and keratotic development seen in adults seldom show in early life. Stimulating remedies such as tar, sulphur, mercury and resorcin, unless used with extreme caution, will tend to defeat our purpose by increasing the inflammation rather than reducing it. Only in cases that have progressed to a low grade inflammation, the lesions being of a continuous character and consisting of a few circumscribed patches, should these remedies ever be considered. Local treatment



can be summed up under 2 headings, namely, antisepsis and soothing protective applications.

In the management of a case we proceed about as follows: the child is to be guarded against undue exposure; cotton or silk is substituted for woollens, which increase pruritus; linens should be soaked in an alkaline solution before washing. The important question of cleanliness now presents itself. Soap is an irritant to an inflamed skin, but washing without soap is our basic therapeutic forte. A solution of borax is used and, regardless of the extent of the eruption, a borax bath (one tablespoonful to a gallon of water) is given. In very acute cases intervals between baths are extended to 3 or 4 days, depending upon the amount of reaction induced; gradually the intervals are shortened as the inflammation subsides, until a daily bath can be given. For inflamed areas, including the scalp, washing morning and night with borax solution is advised, using absorbent cotton for sponging; or, in very acute cases an oatmeal or bran sponge may be found helpful—gauze bags of cooked oatmeal or bran. These sponges can also be used in tub bathing and will be useful as a soothing agent. Recently, witch-hazel has been used and will be found a valuable addition, particularly in washing the scalp, or on other areas preceding each application of medication. It is especially indicated if the borax solution be found irritating. Any ointment of a non-stimulating character is then applied. A base of lanolin or petrolatum, adding oxide of zinc as a mild astringent, and salicylic acid to prevent decomposition, will make a good combination and fulfill all requirements. This is to be applied sparingly, using only an amount sufficient to cover the skin as lightly as possible, and then dusting over the surface a drying powder of either starch or talc. It is important that only a small amount of ointment be used at each dressing, as the object to be obtained is to cover the affected areas with a soft, pliable protective covering, and an excess of grease will tend to cake and form lumpy masses which add to the discomfort. Applications morning and night are usually sufficient, keeping the parts covered in areas of moderate inflamma-

tion, but in locations in which exudation is present, especially on the cheeks, more frequent applications will be required. On the abdomen and back, the eruption is usually less acute and the patient can be made comfortable with a less oily preparation. An alkaline wash followed by application of ung. aqua rosae, with gentle rubbing until the skin feels only slightly oily, and then covered with a dusting powder, will make an easy and comfortable dressing, and in most cases require only morning and night applications.

The scalp will require special attention; in cases with heavy, oily, adherent crusting, washing with any of the solutions mentioned and covering with gauze spread thickly with petrolatum, 2 or 3 times a day, will be found effective. In a few days the crusting will cease to develop, and a lotion can then be added as it is less objectionable than a greasy ointment. A solution of salicylic acid, beta-naphthol, or resorcin may be used, adding a small amount of castor oil.

In cases that have progressed beyond the stage of acute inflammation, a half-dram of beta-naphthol may be substituted for the resorcin as it is slightly stimulating in character and a good bactericidal remedy. In using beta-naphthol care should be taken to limit application to the scalp, as it causes an uncomfortable smarting or burning sensation on other locations. These applications should be continued over an indefinite period, either daily or at intervals sufficient to keep the scalp clean and clear of scales. This step is important and will prevent recurrences in cases of the seborrheic type.

The plan as outlined above, while not always effective in controlling the intense pruritus accompanying acute exacerbations of the disease, tends to greatly modify the discomfort, and in the quiescent period supplies a protective covering for the epidermis, thus aiding in the process of repair, in the reproduction of the horn cell or protective layer of the skin, which is all one can aim to do from indications in local treatment.

The subject of infantile eczema is a most troublesome one both from the standpoint of the patient and the family, but with persistence

and coöperation in carrying out the plan of treatment outlined, we can always look for a good result. Cases due to simple errors of metabolism usually respond quite readily. The most difficult to control will be the patient in whom we find a protein sensitivity, but by careful and painstaking efforts at desensitization to the specific proteins we can often succeed in bringing even these cases to a favorable issue.

#### DISCUSSION

*Dr. H. J. F. Wallhauser (Newark):* I have enjoyed listening to the various papers presented and wish to extend my thanks and voice my appreciation of the progress that has been made in infant feeding and the resulting improvement that has been developed in the treatment of malnutrition in infants.

Drs. Nicholson, Krauss and Rosenberg have covered the subject from the standpoint of diet very well, and Dr. McCauley has brought out the main features from a dermatologic viewpoint. In a brief way I would like to stress a few points regarding the various phases described.

Eczema of infancy constitutes one of the most trying maladies with which we have to contend; the intense pruritus which accompanies this inflammation, causing the patient to scratch until raw bleeding surfaces result, is evidence of the extremely annoying character of the condition, and the effect on the family is likewise a serious feature, since the discomfort of the patient is ever before them. We are, therefore, many times placed in a difficult position in finding remedies for relief or palliation.

In my early days, eczema was regarded as an entity and we were taught to treat the acute stage with soothing remedies and the chronic stage with stimulating remedies and, so far as adult cases are concerned, this plan still holds good therapeutically in regard to local measures, but in infants we are dealing only with the acute type of inflammation, and even though cases occur that show a low grade inflammation, with infiltration and thickening in patches, they seldom if ever require stimulating remedies. Eczema, as Dr. McCauley has suggested, is being considered today as an inflammatory reaction which may be due to some local irritant or internal constitutional cause leading to the development of skin sensitivity. This does not differ greatly from Bateman's description of nearly 200 years ago, in which he described eczema as an inflammation of the skin due to external and internal causes in an individual who was susceptible. The term skin sensitivity, however, more briefly defines the condition. We have succeeded in isolating many of the conditions that are responsible, both of internal and external origin, and have a better understanding of the principles involved, yet we are a long way from the final analysis of this protein disease in which the skin manifestations can only be considered as a symptom in the complex forces concerned in its production. Considered as a skin sensitivity, which may be permanent or transitory, we are in a position to group our cases under definite conditions leading to therapeutic measures in management and treatment; i.e., under permanent sensitivity we find congenital skin defects; in the transitory class, digestive disturb-

ances; while under local causes all factors of an irritating nature are included.

In the local causes, Dr. McCauley laid great stress on parasitic infection and described the definite clinical manifestations of dermatitis seborrheicum as the most common, in which various parasites, although not definite, are held responsible. Isolating the various clinical manifestations of this disease under a specific cause has added greatly to our success therapeutically in adopting aseptic measures. In the application of treatment all the conditions that may be responsible, both internal and external, are taken into consideration, including particularly the nature or degree of the inflammation. A slowly progressive, mild, scaly, erythematous eruption, without intense reaction, can be treated by local measures alone, while cases that show intensive inflammatory exacerbations will require careful study regarding internal contributory causes. In the prolonged persistent type, protein sensitivity is most generally found responsible and offers the greatest difficulty in control. These cases will have to be tested for specific allergic articles and treated by methods of desensitization. Of all the predisposing factors, however, overfeeding is probably the most common, and is generally apparent by the robust fat, healthy appearance of the majority of cases of infantile eczema that come under observation.

Dr. McCauley mentioned orange juice as a possible allergic article. I would like to add that this is the most common cause leading to skin sensitivity, and should receive more careful consideration in advising parents as they are very apt to encourage immoderate quantities of orange juice to the exclusion of other fruits of equal value. In local treatment, we regard the condition as an acute or subacute inflammation and treat it accordingly with soothing and protective measures, including cleanliness. Regarding the latter, we were taught, and followed for many years, the teaching that water was harmful and should never be used in eczema, and it took many years to wear out this erroneous impression, for we had to overcome the fact that washing actually aggravated the condition. Persuasive measures finally succeeded in proving the temporary aspect of this excitant and that cleanliness was an important aid in treatment.

Experimenting with various liquids that might be used for this purpose, in the removal of scales and crusts, the various fixed oils were employed, including olive oil, sweet almond oil, coconut oil, oil of sesame and milk, all of which seemed to be beneficial for a time, but in the end would be found irritating and in many cases responsible for relapses. This was especially so regarding milk, which was responsible for recurrence in cases in which protein sensitivity was present. All the above applications were found unsuited and gradually gave way to alkaline lotions, which were found less irritating and often tended to relieve the intense pruritus. The method of bathing has been well defined by Dr. McCauley and I have mentioned it only to show its importance and the obstacles in its establishment as a routine measure.

Particular attention was called to the treatment of the scalp in the prevention of relapses, and I would like to add that all cases showing a predisposition to development of decided scaling in the scalp should continue the use of antiseptic lotions and cleanliness as a toilet measure indefinitely. Eczema or skin sensitivity leading to dermatitis, as it is now being regarded, constitutes a problem that appeals to all of us, in working out the var-



ious responsible causative factors, and in childhood we are in a better position than later in life in determining many of the predisposing causes, more especially those relating to congenital abnormalities and digestive disturbances, and our success in treatment will depend upon giving each case careful study, especially regarding the constitutional contributory causes, in the development of skin sensitivity.

*Dr. Elmer G. Wherry* (Newark): I would like to congratulate Drs. Krauss and McCauley on their courage in coming here and talking about a subject that is so hard to deal with. I can add nothing whatever to what Dr. Wallhauser has said except a few practical suggestions which have possibly already been brought out but perhaps have not been sufficiently stressed.

Dr. Wallhauser told me 25-30 years ago that it was very easy to cure such cases provided you did not have to save the child, and I think that is still true. Where we get a case of eczema that has not an intolerance to milk, the patient can be made very much better by changing to skimmed milk. As the baby loses weight the eczema will disappear. That may be very gratifying for a short time but if it develops a bronchial pneumonia and dies the treatment is of no avail, and that may easily happen.

Regarding the subject of tolerance, I believe that a child can be kept for a few days on skimmed milk and then the milk can gradually be made stronger, for I believe that the child has the ability to establish a tolerance to almost any kind of food even though that food may be toxic to him at the start. If you consider that when we were small boys we sneaked behind our father's barn and got sick on a cigar, and yet all those of us who had the courage to persist are now able to smoke several cigars a day; when you consider that nicotine is a poison and that we were able to establish a tolerance for it; it is not so strange that we can establish a tolerance for orange juice, milk and eggs, if we go at it patiently and persistently.

One most important thing that has been left out entirely in this discussion, as a therapeutic measure, is insisting on the child drinking plenty of water. I think that is of great importance. Dr. Krauss did speak about giving fruits and vegetables to the mother in order to reduce the fat, but that simply reduces the fat in the milk, as meat is the substance of the mother's diet that will produce fat in the milk. That is simply another way of giving the child a starvation diet. Dr. McCauley, speaking of dermatitis, really gave us the hint of how to be successful in most of our cases, and that is simply a matter of curing the scalp and you cure the disease.

Some of these cases can be cured only when we have the active cooperation of some intelligent caretaker in place of the mother. The mother will not always do what a trained nurse will do. We have frequently taken cases to the Babies' Hospital in Newark, and we cure them by what the nurses call crucifying them. We do not dare do that in the home. By crucifixion we simply mean pinning the child's sleeve to the mattress so that it cannot scratch, and that is done constantly except when the children are being held by the nurse. I had a case a short time ago, a 21 months' old child, well nourished but unable to sit alone; had no teeth; had many of the signs of rickets, and with a severe dermatitis which was vastly worse than any of the pictures shown by Dr. McCauley. The child had been treated by a dermatologist in Buffalo for several months, with

no results. The family then moved to Arlington and the baby was treated by other doctors, with no results. I was consulted and I spent an hour telling the mother, who was a very intelligent woman, what to do. I decided that she would follow my instructions and expected some improvement. There was no improvement for 3½ months. I then took the child to the hospital and within 3 days, on skimmed milk, the child lost approximately 3 lb. and became so weak that it could hardly cry aloud. His condition was so bad that I feared I would lose him. However, his eczema improved on the same treatment he had been having in his own home. I then put him on a most liberal diet, excluding orange juice. The child improved wonderfully and within a few weeks was practically cured. That child's scalp was shaved. The improvement of his general dermatitis followed immediately the curing of his scalp.

A short time after that a similar case was brought to my office and I absolutely refused to treat it unless I could have the child in the hospital. The mother was about as stubborn as I was and asked me to give her a chance to see what she could do at home. I gave her the same general advice which had been used so successfully in the first case and 6 weeks later the child was entirely cured.

These cases can be handled much more easily in a hospital than at home and are ordinarily cured more rapidly.

*Dr. Percival Nicholson* (Philadelphia): There is a method of treatment that has not been mentioned. A great many of these children can be fed on ordinary types of food if they are given in addition ultraviolet treatment. If the chronic type of case is given rather massive doses locally and then general tonic treatment of ultraviolet lights you can usually maintain fairly liberal diet without detriment to the child.

In 1909, Dr. Ruhrah, of Baltimore, used soy bean flour in the treatment of diarrheas. That was used very extensively in giving high protein long before "sobe" was brought out.

My experience with goat's milk has been rather unsatisfactory. It has very little effect in most of these cases. There are lots of children that give no active skin reactions to certain food ingredients but seem to have a distinct eczema that is improved by changes in food. On skin tests, they may not have a very distinct wheal but these children are greatly improved when they are put on acidophilous milk. This changes the whole intestinal flora. *Acidophilus bacillus* is the only organism you can recover from the bowel movement.

It is true that in most of these cases diet has been unbalanced. There is an improper relation between the carbohydrate, fat and protein. These cases are rather difficult and I make a plea to stop giving over a long period of time an excessive high protein, as in dryco. The danger about protein intolerance is that it is very insidious and not realized until an intolerance has been established and improper feeding has been going on for some time.

One of the most recent treatments in eczema, which was rather startling but which was mentioned to me by a very eminent dermatologist, is the administration of boiled milk hypodermically to give protein shock. The reported results have been very satisfactory in many cases so that in the future I intend to employ a certain amount of protein shock as a means of clearing up some of these difficult cases.

*Dr. F. I. Krauss* (Closing): These papers have brought out just what I was after, a discussion of various ideas in regard to the treatment of eczema in infancy. It is particularly interesting to hear it from the 2 standpoints, that of the dermatologist and that of the pediatrician.

I wish to discuss 1 or 2 points that were brought up. First of all, the skin test alone should not be relied on; 60 to 80% are positive in cases of protein sensitization. We know that a child may be sensitive to a skin test at one time and not at another, and that complicates the feeding problem; because we may put the child on a diet and it will suddenly show reaction to some of the foods to which it was previously negative. In these cases it is a question of recurring eczema and re-testing whenever there is a flare-up.

The metabolic imbalance should be considered, of course, as well as the hypersensitiveness of the skin; things over which we have no control. Men who are dealing with allergy group these cases with asthma and we know how many cases later in life suffer with asthma, migraine headaches, vomiting, etc. I do not know how to treat a child who is sensitive to arsenic—I presume the doctor referred to the small amount found in foods.

I do not agree with Dr. McCauley in that the majority of the cases are of seborrheic type. When I started to write this paper last spring I went through my files and took every case in infancy that had a skin test. I took 112 babies under 18 months of age. In treating them from a dietetic standpoint there were only 7 which I could not influence by diet. Those were of the seborrheic type. That is a small proportion in contradistinction to what Dr. McCauley reports. I am very much interested in his viewpoint and in that of Dr. Wallhauser. I found in this group of 112 cases that 14 were nursing babies—7 cured, 7 unimproved; 11 were cases of malnutrition and 10 were cured, 1 improved; 33 were due to milk protein, 20 of whom were cured by drying or boiling the milk, 9 were improved and 4 unimproved; 7 more were milk protein, of which 5 were cured, 1 improved and 1 unimproved by omitting milk; 29 showed fat metabolism, 18 of which were cured, 11 improved; 3 had a sugar metabolism, 2 of which were cured and 1 unimproved; there were 2 with egg protein, 1 cured and 1 unimproved; 6 milk protein cases put on "sobee" diet, 3 cured, 2 improved and 1 unimproved; cause undetermined in 7 cases, 1 of which was cured and 6 unimproved.

In desensitizing with hypodermics of boiled milk I have had no results. I have tried it in 3 or 4 cases. One family thought I was a very cruel doctor, and it did no good in the cases that I have seen. Dr. G. W. Jones, of Clovis, New Mexico, is trying the injection of mother's blood to desensitize these patients and he has reported in his paper and also in a letter to me some very interesting results. I am rather anxious to try it.

I also do not find that oranges are a frequent cause of eczema according to my skin tests. I would like to ask Dr. McCauley how frequently the dermatologist makes skin tests? It is my principle to do it in every case where there is an area free enough to be tested. One point that Dr. Kerley taught me was that you may very often get a reaction on the abdomen but not on the fore-arm, because there is an increased sensitivity of the skin of the abdomen. Also, up over the bend of the elbow we can get positive reactions, whereas near the wrist the skin is not so sensitive.

I do not find that overfeeding is as common as protein sensitization, except possibly overfeeding by fat.

My knowledge of goat's milk is practically nil. I have only used it in 1 case and with no results, although I understand in reading about the chemistry of goat's milk that the chemistry is so near that of cow's milk we cannot expect any wonderful results from its use.

I am glad to hear Dr. McCauley mention the use of baths. I think the plastering of children from head to foot with ointments is very messy and a horrible way of taking care of the condition. The parts should be cleaned with borax and water.

Speaking of the reaction of milk on the skin in these hypersensitive cases, a few months ago a man brought me a cold cream in which he had incorporated a certain quantity of fresh cream and wanted me to try it out. I found that every child who had a milk sensitivity was made worse by rubbing this cold cream into the skin. I had the mothers report to me within a week, and ordinarily if there was an irritation it was increased by this cold cream containing the cream of cow's milk. If seborrhea is a factor in producing this condition of baldness, why do we not see more eczema in females?

I presume when Dr. McCauley speaks of drinking of plenty of water he refers to the nursing mother, because giving plenty of water to the babies seemed to make the condition worse.

*Dr. Francis J. McCauley* (Closing): Regarding the case Dr. Wherry spoke of clearing up in the hospital and the condition recurring again when the baby was taken home, I think that might be explained from the sensitivity standpoint. That baby was either susceptible to an infection or to some other condition in the home, possibly a very slight difference in the diet. In the hospital it was taken away from the allergic factor and the condition disappeared.

Dr. Nicholson mentioned the ultraviolet light. Our limited experience corresponds with that of most dermatologists as being unsuccessful in this type of inflammation in which the neurocutaneous apparatus is easily affected, resulting in increasing the inflammation.

Regarding Dr. Krauss' figures on the percentage of cases in which a seborrheic element is present in only a limited number of cases, they do not agree with the experience of the dermatologist in which this condition is present so constantly as to be considered for local treatment in every case of so-called eczema that comes under observation and if the simple plan of borax washings and soothing protective applications is followed, most cases will recover quite readily. I do not wish to give the impression that there is not also a constitutional factor present in many of these cases. Allergic response may be due to internal and external causes. Hypersensitiveness from internal causes may be due to undigested foods, or to a protein in some food that is properly digested; or the patient may become sensitive to local bowel organisms and these cases require additional management. Both internal and external factors may be present. The dermatitis may start as a sensitization to food or bowel organismal protein and, as a result of scratching, end as a sensitization to the skin organisms. The majority of cases, I believe, due to the skin or sebaceous glands become sensitized to the protein of the seborrheic virus from the outside.

The use of skin tests, in our experience, has not been valuable in directing the management of diet, as we frequently found that cases showing a sensitivity to certain proteins could continue the use of such substances without creating reactions.



This was especially so with regard to milk in which a positive reaction resulted and which could be continued in the diet without causing any exacerbations. For this reason, we have practically discontinued the use of this procedure, relying rather on clinical observations following the ingestion of certain articles of diet.

In answer to Dr. Nicholson's question regarding the use of an ointment containing cream of cow's milk, this is easily explained by the sensitization of the infant to a protein of cow's milk contained in this preparation.

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## THE MODERN TREATMENT OF VARICOSE VEINS

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Varicose veins are frequently encountered and the writer has been impressed with the amount of disability which they occasion. When they become complicated the suffering is much increased and, if neglected, the patient may become an invalid for life. It is in the interest of the many sufferers from varicose veins that this communication is written.

In the past these cases have been treated conservatively or radically. In the conservative treatment the patient was given an elastic stocking or bandage to wear. This was followed rather indifferently, both by the physician and patient. The patient, usually a woman, objected to the presence of the bandage as being unsightly. The radical treatment consisted of operations which removed the varices, or the entire saphenous vein was removed from groin to ankle. Neither of these methods (conservative or radical) gave results satisfactory to the parties concerned. The conservative always failed, except in cases where the veins were very small, but it did accomplish one thing when the treatment was sufficiently persistent; it did keep the veins from getting worse. In fact, that was all that was even hoped for. The radical method was applied when the veins were extremely dilated, usually the entire saphenous trunk, or when ulceration had supervened. Very radical procedures were then necessary and the surgical treatment was successful only in so far as the efficiency of the operation allowed.

The most successful was the Mayo method in which the great saphenous vein was ligated at the saphenofemoral junction, and the saphenous vein removed as far down as the ankle. This was, at times, supplemented by additional incisions, with excision of outlying varicose bunches. This method, however, carried a direct mortality of 1 in 200 and a subsequent mortality of 1 in 200; that is, a total mortality rate of 1% resulted from the radical surgical treatment. This, in itself, caused many physicians to advise against operation and some conservative surgeons refused to operate. One of the real drawbacks to the operative treatment, from the patient's standpoint, was the economic factor. The period of disability following operation was usually about 6 weeks and sometimes much longer. The treatment of varicose ulcers was frequently unsuccessful, regardless of how radically the operation was done. The above status of the former treatment of varicose veins is not exaggerated and it is not surprising that other and better methods have been sought and that the injection method of treating these cases has been developed, and, fortunately, this method marks a great advance in handling these cases.

It is very surprising, however, that the method has not enjoyed the full sanction of the rank and file of the profession. It is also unfortunate that more physicians do not know more than they do about this method, its application and end-results. It is a fact, that comparatively few varicose vein cases are referred for treatment. Sometimes this is due to the fact that the examining physician does not know about such treatment at all, or if knowing, he does not know anyone doing that work. Most often it is due to the fact that examination does not disclose the presence of the veins, and again, when they are found they are passed over as an insignificant finding. If I can succeed in bringing this method to the attention of a few more men, and can impress upon them the necessity of treating varicose veins, when found, I will feel that the time expended hereon has been well worth while.

The term "varicose veins" may be applied

to veins in any part of the body, but, due to common usage, it has come to be associated with varicose or dilated veins of the lower extremities. That is the application in this paper.

If one examines the accompanying plates, showing the normal anatomy of the leg, it is apparent that there are 2 principal sets of veins. Those beginning over the top of the

The posterior veins are known as the short or lesser saphenous veins. The long internal chain of veins becomes known as the long or great saphenous vein. Both of these sets of veins run in the subcutaneous tissue throughout their course and both sets have communicating veins which join them with the deep veins. These deep veins are entirely beneath the muscle fascia layer.

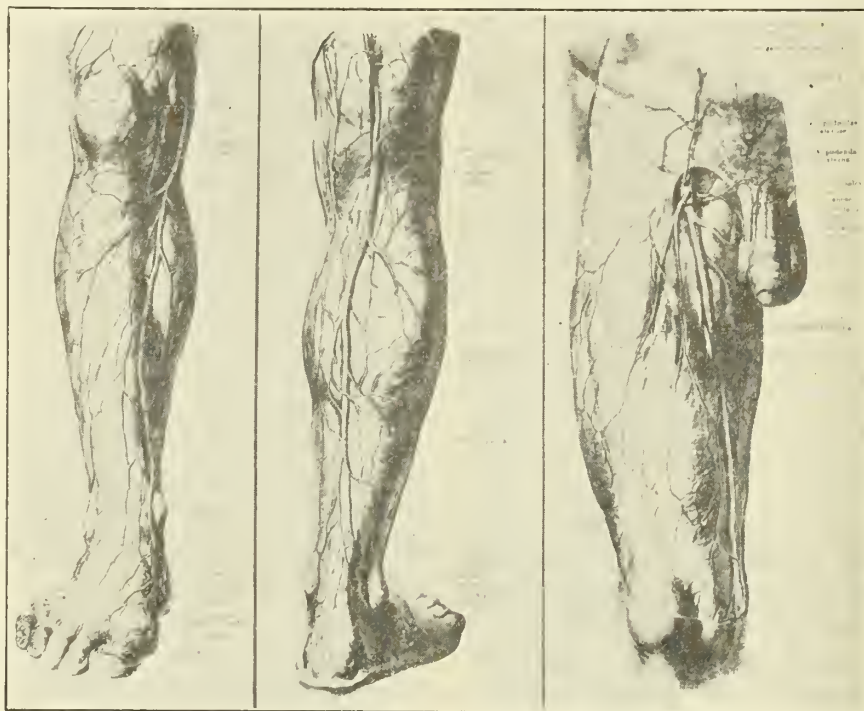


PLATE 1

Legend: Illustrating the 2 main venous channels of the leg below the knee. Those beginning about the internal malleolus ascend as the great saphenous vein on the anteromedial aspect of the leg, while those beginning about the external malleolus pass up the posterior surface of the leg as the lesser saphenous.

The course of the great saphenous above the knee and relations about the fossa ovalis are shown. The connecting veins between the superficial and deep veins are well illustrated, as well as is the relationship between the superficial veins and the muscle fascia.

foot and around the internal malleolus unite and extend upward to the inner and anteromedial aspect of the thigh to the groin, where it joins the femoral vein about 2 inches below Poupart's ligament. Those beginning about the external malleolus extend up the posterior surface of the leg, over the calf, and end in the popliteal space where they join the popliteal vein. The popliteal vein then passes to Hunter's canal where it becomes the femoral vein.

Thus, there are 3 sets of veins in the leg that one has to consider in the diagnosis and application of treatment—the superficial, the deep, and the communicating. Each of these systems has valves placed at irregular intervals and usually just distal to where a branch joins. The presence of normal valves throughout prevents varicose vein formation, but when some of them give way and become incompetent, then varicose veins are sure to



develop, and the extent and type of varicose veins that will develop is dependent upon the number of valves involved.

#### ETIOLOGY OF VARICOSE VEINS

Much has been written on the etiology of varicose veins and a vast amount of experimental work has been done in an effort to locate the cause of the condition. A review of this work would not be in the scope of this manuscript. Among the theories advanced are: (1) Congenital weakness of the vein walls or valves, or both; (2) that there develops a loss of nerve and muscular tone of the vein wall; (3) that the cause is an infectious one—a low grade periphlebitis or phlebitis secondary to emboli, or through organisms being brought to the vein by the blood stream or by extension from adjacent infection; (4) that the endocrine system is responsible; (5) that occupation is the principal cause.

It is difficult to account for the cases seen in young people unless congenital weakness is the etiologic factor. The youngest patient was 9 years of age. We know that varicose veins develop following infections such as scarlet fever, pneumonia, rheumatism, typhoid fever and influenza. We also know that varicose veins may follow trauma, and we have seen them follow a superficial phlebitis. By far the most frequently associated factor is occupation. We find them in people whose occupation requires a great deal of standing—barbers, policemen, waiters. It is probable that in the great majority of cases we have to deal with both a congenital weakness and the associated factors such as infections, occupation and influence of conditions producing an increased intraabdominal pressure, like constipation, asthma, chronic cough. Besides the above types of cases we see varicose veins secondary to obstructive pathology—fibroid uterus, intraligamentous pelvic cysts, tumors of the inguinal glands, cirrhosis of the liver. We also see them in the presence of marked cardiac decompensation and during and following pregnancy.

#### DIAGNOSIS

The diagnosis of varicose veins is perfectly obvious. It is necessary, however, in the average case, to have the patient stand flat on his feet. The mere diagnosis of varicose veins, however, is not sufficient. One must determine, as far as possible, the etiologic factor. It should be easy to rule out those cases due to obstructive lesions outside of the vein; cirrhosis of liver, cardiac decompensation, fibroid uterus, pelvic cysts, inguinal adenitis, advanced pregnancy. It then matters little, so far as relief to the patient is concerned, what is the etiologic factor, but it is still important to determine how extensive the veins are. Is there only a short segment involved? Is the entire great saphenous vein involved or the entire lesser saphenous? Is the superficial, deep or communicating system at fault? Is there a combination of any of the systems? It is obvious whether the varix is a short one or whether the entire length of either the greater or lesser saphenous is involved, but in order to determine whether the superficial system is alone involved, or whether the system and communicating systems are simultaneously involved, or whether the superficial, communicating, and deep systems are all involved, requires the application of 2 tests.

#### TRENDELENBURG TEST

- (1) Have patient lie flat on the table.
- (2) Elevate the leg so that the veins become empty.
- (3) Place the radial edge of the thumb across the upper thigh and make pressure about 3 in. below Poupart's ligament and medial to the pulsating femoral artery.
- (4) Have patient stand up, meanwhile keep the hand applied as directed, as this obstructs the great saphenous vein. Now, the test devised by Trendelenburg advised that the hand obliterating the saphenous vein be removed and immediately following this the column of blood would fill the great saphenous trunk with a thud. In other words, the entire trunk would become filled instantly. This would occur when all the valves of the great saphenous were incompetent. Instead of doing the

above as soon as the patient stands, continue to apply the pressure to the saphenous origin and if the veins fill slowly from below upward one knows that the valves of the communicating veins are intact. Then, release the pressure on the saphenous and if the entire saphenous trunk fills immediately one knows that the valves are incompetent in that system. This is the Trendelenburg positive test. If,

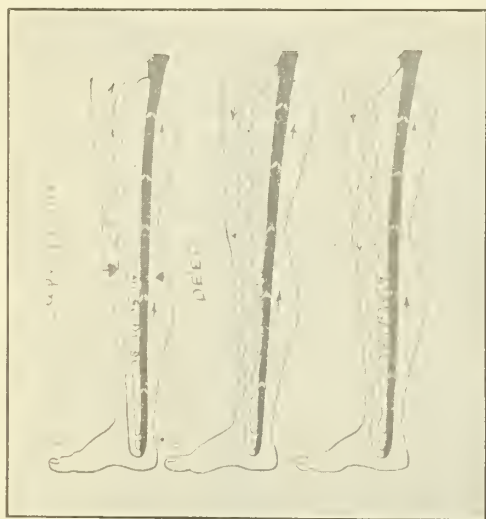


PLATE 2

Legend: The negative, positive and double position Trendelenburg test. The patient's leg is elevated and pressure is made on the great saphenous vein and the patient is asked to stand up. (a). If the veins remain empty or fill up slowly, from below, and do not change in size after the pressure is released, the test is negative. There is no reversed flow in the saphenous system. (b). If the veins remain empty so long as pressure is maintained, but fill up from above with a sudden gush when the pressure is released, the test is positive. The flow of blood in the saphenous vein is reversed. (c). If, however, the veins fill up suddenly on standing, in spite of saphenous compression, there is a reflux from the deep veins. Releasing the compression may produce a further filling of the veins, thus making the test doubly positive. This latter condition, indicating a valvular insufficiency of the communicating veins, is not favorable to the injection treatment and is a frequent cause of recurrence.—(Diagram from Homan).

on the other hand, the veins below fill very rapidly, one knows that the valves of the communicating veins are incompetent. If now the pressure on the saphenous is released and the entire saphenous fills with a splurge, this is known as the "double positive" Trendelenburg test. If the veins below fill rapidly and when the pressure on the saphenous is released there is not a rapid filling of the trunk from above

downward, then we have the Trendelenburg negative, denoting that the valves of the saphenous trunk above the varices are competent but that some of the communicating valves are incompetent.

There now remains another very important point to determine. Having determined the condition of the superficial system, it is necessary to determine whether these are dilated and varicose as the result of obliteration of the deep veins obstructed from a previous phlebitis or otherwise. In other words, are the superficial varices compensatory in their nature? If the superficial veins are obliterated by treatment, are the deep veins competent to care for the venous circulation? This is determined by Perthe's test, as follows: Place a tourniquet about the upper-third of the thigh while the patient is in the standing position, only sufficiently tight to obstruct the superficial veins; the patient is asked to walk to and fro for about 2 minutes; the leg muscles squeeze the blood out of the deep veins and aspirate the blood from the varicosities; and the superficial veins become diminished in size. If these veins do not diminish in size the deep veins are not competent.

So far we have diagnosed the presence of and the type of varices. Now we have come to the clinical side of the case. Many of these patients present themselves for treatment because of pain in the calf or joints. A differential diagnosis must exclude Buerger's disease, neuritis (this includes pressure pain of pelvic tumors), tabetic pains, arthritis, and weak feet. Actually, the only important ones of those to rule out are: (1) Buerger's disease, as the veins are not the cause of the pain in this disease, and (2) pain produced by pressure of pelvic or inguinal masses. Buerger's disease is easily ruled out by determining the presence or absence of pulsations of the dorsalis pedis and posterior tibial arteries. Pelvic tumors and inguinal tumors are ruled out by adequate examination. The other conditions are actually benefited by treatment of the varices, thus improving the circulation. This improvement is especially marked in cases of arthritis of the knee joint associated with varicose veins and pain due to weak feet.



## TREATMENT

The treatment should be approached by 3 different methods:

(1) The injection method: This can be depended upon to give excellent results when used on properly selected cases. The proper cases are tabulated:

(a) Those cases where there are scattered or segregated varices. This includes those on the thigh, as well as the lower leg.

(b) All cases where the posterior veins (the lesser saphenous trunk) are alone involved or when combined with the great saphenous trunk, provided the latter is not involved higher than 4 or 5 in. above the knee. If the varices are particularly large, amounting to venous sinuses, this method may fail to give a permanent result when used alone.

(2) Operative ligaturing of the great saphenous followed by injection treatments.

(a) This is indicated in all cases giving a positive Trendelenburg test. That is, when the entire great saphenous chain is involved. Much more rapid results are obtained by this combination. While it is possible to inject the entire trunk, in segments, and even at the saphenofemoral junction, the method is far from being as safe as ligation.

(b) Those cases that have progressed so far that the veins have, literally, become pools of blood, instead of having the outline of a vein. One reason why these cases fail to give results with the injection method is because the intima has been so stretched as to be mostly scar tissue and therefore cannot react to the injection solution to form a good thrombus.

(3) Operative treatment. This is indicated for those cases giving a Trendelenburg double test. In these cases the valves of the great saphenous trunk are incompetent and, in addition, the valves of the communicating and deep veins are also incompetent. Ligation would not control the reflux from the deep system. The procedure of choice in these cases is to ligate the great saphenous vein at the saphenofemoral junction and then strip the saphenous vein as far as the knee and ex-

pose the trunk below the knee so as to be able to ligate the communicating veins and remove the varices. In some of these cases it has been possible to obliterate the veins below the knee instead of excising them. This latter may first be tried, but the great saphenous must be ligated first.

## TECHNIC OF LIGATING SAPHENOUS VEINS

This operation is done under local infiltration anesthesia. The line of incision is made 2 fingers' breadth below Poupart's ligament to the inner side of the anterior surface of the thigh. The line of incision is infiltrated with 1% novocain-adrenalin solution and the incision made about 1½ in. long through the skin, in a transverse direction; then the subcutaneous tissue is infiltrated with the same solution. The vein is then exposed and 2 cat-gut ligatures are placed and tied and the vein divided between the ligatures. Do not use artery clamps; in order that the intima may be traumatized as little as possible. The incision is then closed with black silk or Michel clips. I use the latter because I feel that a source of infection is thereby eliminated. These clips are removed on the third or fourth day. The procedure may be done in the office and the patient allowed to go home and follow usual routine or it may be done in the hospital and the patient kept in bed for 5 days. Either method is safe.

## TECHNIC OF INJECTION TREATMENT

There have been many solutions advised and used with varying results. My experience with *invertose* (aqueous invert sugar solution) 60% or 70% has been entirely satisfactory. In the beginning, I used 20% sodium chloride, but gave it up because of the severe pain occasioned by each injection. Some patients complain of a heavy feeling of the entire leg, others of a mild pain in the injected areas and a few have felt a mild sensation of electric shocks, but this immediate pain always disappears very shortly after they have walked out of the office and the subsequent course is entirely painless. In a few cases there has been a moderate soreness lasting 2 days.

## TECHNIC FOR INVERTOSE INJECTIONS

(1) The syringe, a 10 c.c. Luer-lok type is filled with the invertose solution, and a 23 gauge, short, bevel needle attached.

(2) The patient has been standing during the period of filling the syringe and the veins are now distended. The vein is selected and the skin over this vein painted with tr. iodine. Now the patient is asked to lie down on a low table and the needle inserted into the vein without delay. Do not lose any time after the patient lies down or the vein will collapse. After the needle is in the vein have an assistant strip the blood out of the segment to be injected and hold the skin taught during the entire procedure of injecting. Then inject the solution fairly rapidly. Be sure your needle is in the vein. As soon as the injection is completed, note the time but don't remove the needle. Now allow 5 minutes to pass before the assistant releases his pressure and before removing the needle. Then apply a small sterile pad, with a strip of adhesive, over the puncture wound. Apply an "Ace" bandage from ankle to above the injected area.

If one has difficulty in keeping the vein distended long enough to insert the needle, a tourniquet may be applied above the selected vein while the patient is standing. If still the vein collapses as soon as the patient reclines, then the injection may be given with the patient standing. In the latter cases, as soon as the injection is completed it is wise to have the patient lie down for the 5 minute pressure period.

The patient is then allowed to leave the office and go about his usual duties. Injections are given in the same leg at weekly intervals, but one may inject 2 or 3 veins in the same leg at one time. The "Ace" bandage should be worn continuously during the entire course of treatment in order to obtain the best results.

The average cases will require from 3 to 5 injections for each leg. The worst case of uncomplicated varicose veins in my practice required 6 injections after the great saphenous had been previously ligated at the saphenous opening. However, I used 10, 15 and 20 c.c.

injections for this particular case. So far I have not had a failure with this preparation (invertose), but should I run into such a case, I would follow the suggestion made by de Takats and use 70% invertose and 30% salt solution mixed in equal quantities.

MECHANISM OF OBLITERATION OF VEINS  
WITH SOLUTIONS

Much space has been used to present the exact changes occurring after the injections have been given, and experimental work has been produced to prove the exactness of statements and accepted theories. To be concise, the solution acts as a chemical irritant on the intima, causing it to become swollen, fibrin is deposited and red cells become entangled in the fibrin network, and within a few hours the vessel is filled with a blood clot. After a few days (4 to 6) organization of this clot is evident by penetration of the clot by fibroblasts and the presence of new capillaries. These new capillaries spring from the intima out to the clot, thus anchoring the thrombus. Contraction of the clot, with narrowing of the vessel, proceeds until at the end of about 3 or 4 weeks the original varicose vein can be felt as a small cord beneath the skin. There are 2 principal reasons why the incidence of embolism in this type of treatment is so small. The first reason has been given above, in which it was shown that the clot is fixed to the intima with newly formed blood vessels. The second reason is that the circulation in varicose veins is reversed. This has been positively proved by injecting lipiodol into a varicose great saphenous and then watching the behavior of it, inside the vein, under a fluoroscope. The lipiodol particles are seen to go downward, instead of upward toward the femoral artery.

Provided cases are properly selected for the 3 forms of treatment, one can feel confident of promising a cure of the veins present, but other veins might become varicose at some time in the future.

The most promising group of cases consists of those selected for the injection treatment



alone; all of which can be cured. This is naturally so because the disease has not progressed to the extent that requires operative treatment, either combined with injections or alone.

As compared with the old forms of treatment, in which operation was the only radical treatment, a very decided advance has been made, not only from the standpoint of cures and improvements, but most especially from the standpoint of mortality of the treatment.

The treatment of varicose ulcers has not been attempted in this communication because it is a condition warranting a separate presentation.

### CONCLUSIONS

In the foregoing paragraphs it has been my desire to discuss the treatment of varicose veins from a purely practical and clinical standpoint. I particularly wish to make 2 points clear.

(1) That the injection treatment of varicose veins is now a legitimate procedure. Because of this established fact, it should be recognized more widely by the rank and file of the profession, and furthermore, patients should be advised of this form of treatment, and they should be encouraged to have their varicose veins treated before they become so extensive as to require more than injection treatments. The next generation, if the above advice is followed, will be treated so early in the stage of the varicose vein development that the injection treatment alone will suffice.

(2) That the injection treatment of varicose veins is not a panacea. All veins can not be so treated. It is not now sufficient to say: "Varicose veins; injection treatment indicated." It is necessary to segregate the different types of veins and apply the appropriate type of treatment. Some cases require surgery alone, while others require a combination of the two, and still others should not be treated radically at all, because they are compensatory in nature.

## INTRADURAL CAUDAL ANESTHESIA AS AN OFFICE PROCEDURE

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The advantages of intradural anesthesia are its low toxicity, its totality, and the complete relaxation of such voluntary muscles as are under its influence. No other anesthesia gives with equal safety either so deep insensibility to pain or such entire muscular flaccidity. Its great disadvantage is the vascular depression caused when the splanchnic nerves are blocked. The use of an anesthetic solution of high viscosity and specific gravity, however, enables the operator successfully to limit the anesthetized region by mere control of position of the patient. Such a solution is now marketed under the trade name of *gravocain*, and produces perfect caudal anesthesia via the intradural route. It has been described by its originators, Pitkin and McCormack, and by its proper utilization blocking of the splanchnic nerves and dilatation of the splanchnic blood vessels are avoided and complete anesthesia is secured, for more than 2 hours, of the lower 4 in. of the rectum, the anus, cervix and vagina, perineum, scrotal integument and part of the scrotal contents, the penis, urethra, prostate, and floor of the bladder. The successful attainment of so deep and lasting caudal anesthesia opens new fields for office procedures, otherwise necessarily performed in a hospital, in urology, gynecology and proctology. These operations are limited only by the convenience of the operator and the severity of aftermath, for the patient can be at home, in bed if necessary, before the anesthesia has worn off.

Gravocain is usually injected while the patient is in a sitting posture, with elbows resting on knees, the back bowed outward and the head inclined forward. Since experience has shown that 0.2 c.c. of this solution yields complete caudal anesthesia lasting 2 hours, it is my custom to introduce it with a tuberculin syringe to permit more accurate dosage. No admixture with spinal fluid is necessary,

and anesthesia is almost invariably attained within 5 minutes. I have had no failures. Immediately after introduction of the solution and withdrawal of the needle the patient is instructed to sit as erectly as possible in order to minimize leakage of spinal fluid. He is kept in this position until anesthesia sets in, and then placed—or places himself—in the semi-recumbent posture for the operative work to be done. The third or fourth lumbar interspace has proved most satisfactory as the point of injection, for if injected higher the solution anesthetizes, to variable extents, the higher nerve roots as it sinks to the bottom of the dural sac.

When locomotion is interfered with, the abductors of the thigh are first and most affected, since their nerve supply is from the sacral plexus. If the subject attempts walking too soon, in such case, he stumbles over his own feet and his knees interfere. He cannot separate his lower extremities successfully until the abductors' nerve control is reestablished. There occurs little or no paralysis of the thigh abductors, because their nerve stimuli proceed through the third and fourth lumbar roots via the obturator nerve.

Intradural caudal anesthesia was given in the office to 24 ambulant patients, with an average dose of 0.22 c.c. gravocain, at either the third or fourth lumbar interspace. The average time elapsing between administration and unaided departure from the office was 1 hr. and 24 minutes. The only advice given these patients concerning the anesthesia was to keep their heads and shoulders higher than their hips until at least 3 hours had passed. Some of them walked home, some took cabs, and some drove their own cars. The series comprised the following: fulguration of verumontanum, 3; injection of vas, 1; fulguration of median bar, 3; intraprostatic injection, 4; fulguration of caruncle, 1; relief of acute retention from urethral stricture, 1; internal urethrotomy, 1; circumcision, 1; diagnostic cystoscopy, 2; injection of hemorrhoids, 5; fulguration of cyst of bladder neck, 1; opening of ureterocele with scissors through cystoscope, 3. The ages of the patients ranged from 26 to 74 years. No preliminary

narcotics or sedatives were given. The condition of the heart, blood pressure, and lungs was given no consideration. Pallor and faintness occurred twice, in each case *before* the anesthetic was given, and were recovered from by the time anesthesia was complete. There was 1 post-puncture headache. (The patient, a male of 26, left the office at 10.30 p. m. with instructions to go home to bed. He did so, but arose again at 1.30 a. m. and drove a milk wagon for several hours.) There was no such dread of repetition as general anesthesia causes. One patient received intradural caudal anesthesia 3 times, and 4 others took it twice apiece.

### CONCLUSIONS

(1) Intradural caudal anesthesia with gravocain seems to be a safe and conservative office procedure.

(2) Vascular depression, the most constant deterrent to spinal anesthesia in general, is avoided because the splanchnic nerves are not blocked.

(3) Certain contraindications usually recognized as pertaining to intradural anesthesia, such as hypotension, cardiac weakness or incompetency, limited pulmonary capacity, and extreme hypertension, do not apply to intradural caudal anesthesia.

(4) The technic is simple and the dosage small and accurate.

(5) Anesthesia is rapid in onset and endures from 2 to 3 hours.

(6) Patients undergo it gratefully and repeatedly since it causes no such dread of repetition as does general anesthesia.

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## A SKIN TEST FOR WHOOPING-COUGH; PRELIMINARY REPORT

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and

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With the exception, perhaps, of measles, there is no more difficult disease to control than whooping-cough when it becomes epi-



demic in character. The reason is the presence at such times of great numbers of unrecognized and undiagnosed cases, in which children with spasmodic coughs, not quite severe enough to show or entirely lacking in the tell-tale whoop, are unsuspected of being true cases of pertussis, and are enabled to broadcast infection among susceptible persons of all ages. The diagnosis of whooping-cough, even by the physicians, has depended upon history of the child's cough, of his having been exposed to a known case, or to accidental occurrence of a cough paroxysm in the presence of the physician. The laboratory diagnosis of pertussis by sputum examination, or by the plate method, is seldom attempted as a routine procedure by practicing physicians or the local health department.

The inciting cause of whooping-cough, the now generally accepted Bordet-Gengou bacillus, has been characterized by a signal absence of toxin formation in culture, and a remarkably low virulence toward laboratory animals. Cultures of the bacillus, in strength of billions of bacteria per cubic centimeter, have been injected into small guinea-pigs without producing untoward results. Similarly, in use of the vaccine for prophylaxis and curative action in cases of whooping-cough, children have shown a remarkable tolerance for quite enormous doses of the bacillus. The toxin of this bacillus, although of only limited toxic power, is capable of producing a very definite amount of immune bodies in the blood stream of the infected individual, as is shown by the high degree of immunity following an attack of whooping-cough. Second attacks are so rare as to be curiosities of medicine, and this immunity is presumably of life-long duration.

In 1928, M. V. Pechere, of Brussels, reported the results of intradermal tests upon 104 children, 70 of whom gave positive reactions and in 60, or 84% of these, whooping-cough was actually present. Of 23 children with a negative reaction, 16% had whooping-cough and 84% had typical paroxysmal coughs. Among 10 children in whom whooping-cough had been definitely diagnosed, there were 10 positive reactions. In 24 cases of pertussis in process of evolution 20 gave posi-

tive skin reactions, while in 7 children who did not have whooping-cough, 6 gave negative reactions. Pechere was of the opinion that the test would be useful for early diagnosis of the disease.

For the purpose of determining the character of reaction described by Pechere and usefulness of the test in hospital work, the writers decided to test out this action in patients suffering from acute attacks of whooping-cough and in a number of children free from that disease. In this intradermal test the antigen used was a vaccine made from stock culture of the Bordet-Gengou bacillus containing on the average 1,000,000,000 bacteria per cubic centimeter. The amount used for each intradermal test was 0.05 to 0.1 c.c., the point of injection being the forearm.

In this preliminary work the group of children was composed of those in the hospital wards at that time, suffering from whooping-cough in various stages of severity, from the recently arrived case with frequent paroxysms to the case nearing the end of a 6 weeks' quarantine period. There were 11 children injected intradermally; 6 with 0.1 c.c. and 5 with 0.05 c.c. of the stock vaccine. In all these cases the results were the same. There appeared at the site of injection, within 12 to 24 hours, a distinct area of redness varying from 1/2 to 1 inch in diameter. The reaction, however, was transient in character and within 48 hours faded, leaving nothing visible but the point of injection. There was no pain or discomfort and no subsequent scaling or pigmentation.

For the purpose of finding how far the skin reaction could be used to show the absence or presence of immune substances in the blood of average individuals, a group of 24 children were tested, 10 of whom had histories of a previous attack of whooping-cough and 14 who had no such history. Among the 10 with histories of whooping-cough, there were 8 positive and 2 negative reactions. These results would indicate the very definite presence of immune bodies in 80% of recovered cases. In the 2 negatives, the possibility of errors in the original diagnosis cannot altogether be excluded. With regard to the other

group, the results were not quite so clear-cut. Among the 14 children having no histories of a previous attack of whooping-cough, 7 were positive and 7 negative. Of the 7 positives, 2 were very slight reactions and 1 was negative at the end of 24 hours. The results in this group could not be said to be conclusive and did not parallel the experiences of Pechere who had a much higher percentage of negative tests. His group was, however, small; only 7 children.

These results substantiated the claims of Pechere, that there is present in the individual suffering from whooping-cough very definite antibodies which are specific against the Bordet-Gengou bacillus. This was particularly clear in our group of children suffering from active symptoms of whooping-cough, all of whom showed positive skin reactions.

The conclusions derived from this study, although covering only a small group of supervised cases, are significant enough to suggest use of the intradermal test for whooping-cough as a means of quick diagnosis, especially where there is immediate need of segregation. This test can also be used to determine susceptibility to whooping-cough, and enables us to separate susceptible children from suspected cases and to determine whether prophylactic doses of whooping-cough vaccine should be administered.

#### SUMMARY

The group of children upon whom intradermal tests for whooping-cough were made, although small, indicates without doubt the constant presence of an allergic skin reaction in active cases of the disease.

The intradermal dose of the antigen, whether 0.1 or 0.05 c.c., provoked the same reaction in all the children.

The transient character of the area of redness, appearing quickly between 12 and 24 hours after injection and disappearing more or less completely within 48 hours, is in keeping with the known low toxicity of the Bordet-Gengou bacillus.

In the group of 24 children tested for susceptibility, 80% of those having a history of a previous attack of whooping-cough showed

positive skin reactions. In the group having no record of previous whooping-cough, 50% were positive and 50% negative.

Further work along these lines with a slightly stronger antigen is in contemplation.

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### SOME THOUGHTS ON MEDICAL ECONOMICS AND MEDICAL PRACTICE

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The symposium on medical economics which appeared in the November issue of our State Society Journal is so excellent, so rich in ideas and originality, that the editor deserves the gratitude of the members for giving it a proper place and for calling the profession's attention to it editorially. Not that the subject is new; indeed, we are fed up with it of late in the medical and lay press, but it is presented so clearly and eloquently by all the speakers that any member, if he devotes a little time to reading these addresses carefully, will be fully aware of the magnitude of a problem which now worries the best minds of our profession. He will see that here is a topic of the utmost importance to the profession and to himself, whatever his age, his standing, his line of work, or his economic status may be. He will also realize that he must make up his mind as to his own views, as to his own attitude toward a new trend in practice of medicine, so as to be ready to act accordingly when the time comes that some practical plan shall be offered him for consideration and for vote.

It is gratifying to notice that all 3 speakers are fully in accord; there is no disagreement among them on any vital point. They not only agree among themselves but all support the views of Dr. Harris, recently President of the American Medical Association, and of Drs. Pusey, Bevan and West. It appears that they all agree as follows:

- (1) They are opposed to state medicine.
- (2) They agree in the desire and efforts to preserve our individualistic medicine.



(3) They agree that the medical profession, as it stands today, is not doing all it should to bring the fruits of scientific achievement to all classes of the people.

(4) They agree that the cost of illness is not within the means of the majority of the people.

(5) They warn the profession that if it does not remedy existing conditions, by its own efforts, outside forces will attempt to do so, and will lower the dignity and usefulness of the profession and make the doctor a hireling of big capital; in short, will introduce some kind of public control over medicine.

Such is the issue. What is to be done about it?

In their answers to this vital question, the speakers likewise agree fully. The profession must take into its own hands the remedy, must change conditions so as to render adequate scientific aid to the people, must reduce the cost so that it shall be within reach of every one, and must by adequate service gain the confidence of the people. But how are these *pia desiderata* to be brought about? Here, after all, lays the crux of the whole matter.

Dr. Harris made the following definite proposal: Every county society shall organize all its members and establish a medical center, owned, controlled, and managed by the society itself. This center should function as a pay clinic with every reputable physician a member on the Hospital and Clinic Staff. Services rendered should be complete, and charges made according to nature of services rendered and the means or economic status of the patient. After necessary over-head expenses are deducted, the balance would be paid to the physicians on the basis of services rendered. Later, arrangements should likewise be made for the care of patients at their homes, as well as for hospitalization when necessary. Obviously, this institution is not meant for the rich class, who can afford to have the best services privately, but for the large middle-class of our people.

Drs. Hall, McBrayer and Reik endorse the Harris plan but, ideal as it may seem, the writer of these lines feels convinced that it is

utterly unworkable and is destined to remain a scheme on paper only. To begin with, the medical profession traditionally has always been poor material for any concentrated effort. A county medical society has no uniform membership, such as a labor union has; there is no resemblance of equality among members as to education, achievements, personality, ethics, etc. One cannot see how, in a large community with several hundred physicians, all or even a majority of them could be attached to the proposed center on an equal basis.

The difficulties met by the managing board would be no less than unsurpassable. A physician friend, discussing this plan, expressed himself thus: "I would rather see some kind of state medicine." It might be workable in a small community, with a dozen or so medical men, but originally the issue arose, not in small communities, but in large centers.

In spite of great interest in the problem, the writer is not aware of any other definite plans to improve upon the present method of practice of medicine. It is true that the national "Committee on the Cost of Medical Care" has not yet completed its elaborate survey of all the contributing factors and one must patiently wait for a complete report and some definite recommendations. But, acknowledging the very high standing of the members of that committee, one wonders whether its membership includes an ordinary practitioner of medicine, one who in his daily and hourly work is confronted with all those countless details which arise in any sphere of purely human relations and which slowly, gradually, but persistently, have brought the big issues to the front. Such a practitioner, small as his voice may be, is entitled to a hearing.

Let one stop and consider what are the factors which in the last decade or so have changed the character of medical practice and contributed to the high cost of medical care to such a degree that it has become a national issue? Realizing, as every one must, that a certain rise was inevitable on account of the diminished value of the dollar, the higher cost of all other commodities and the higher stand-

ard of living, the following 3 factors are, in the writer's opinion, at the base of the whole issue.

(1) Gradual disappearance of the general practitioner, the family doctor, and the rise of specialists. The practitioner always was, and is today, reasonable in his fees and hardly any complaints are made against him. He is in closer contact with his patients, better acquainted with their family standing, and in most cases money matters between them are being arranged without dispute or hard feeling on either side. He will always try to place his patient in the most favorable condition without undue strain on the victim or his family. There is no reason whatsoever why he cannot take care of the great majority of cases of illness. A somewhat more adequate preparation of himself is desirable, and could be achieved by adding 1 year more to his medical course, taking this year from the pre-medical college requirements. Not so with the specialist. After having trained himself in a certain branch of medicine (this training often of quite a short duration), he believes himself on a much higher plane and entitled to higher remuneration for his services. There is no sound reason why the young man who shortly after concluding his internship starts as a pediatrician, or nose-and-throat man, or dermatologist, or any other kind of specialist, should be entitled to fees higher than those of a general practitioner. It may be a simple conjunctivitis, an every-day nasal condition, a healthy infant requiring a routine formula which may take 2 minutes to determine, for which the specialist charges double the amount of what an experienced practitioner charges for half an hour's general examination of his patient. This by no means applies to the expert, but the average specialist is not an expert; he is only a practitioner in a limited field. Experts are rare, and should handle only cases referred to them by the practitioner, general or special. In a city of 500,000 population, one will find hundreds of specialists and hardly a dozen experts. One must admit that the present specialist's fee, which is charged often not for the nature of his services

but for his alleged higher standing, is not justified.

(2) The most serious factor contributing to the high cost of medical care is found in use of the latest developments of medical science, requiring often costly procedures in rendering a diagnosis. Various laboratory examinations, including use of x-rays, are often necessary and are at present quite costly. It is true, that more than 20% of patients visiting the physician are suffering from minor ailments and do not need more laboratory tests than the well-equipped practitioner is easily capable of making, but the other 30% constitutes quite a problem to be reckoned with. Complete and repeated blood examinations, blood chemistry tests, gastric radiography series, pyelographs, electrocardiograms, metabolism tests, etc., are at times necessary and often not within the financial possibilities of the patient. It greatly handicaps the medical man who has for his clientele the workingman, the white collar man, and the small tradesman. One can easily understand that the private laboratory, with considerable overhead expense, having but 2 or 3 Wassermanns to do, must charge \$5 each, while it would not require much more time and labor to make 20 or 30 similar tests at the rate of \$1. The roentgenologist's charges of \$50 to \$100 for gastric series are, again, due to big overhead, to time utilized only in part, to the comparatively small number of such cases. The active laboratory working full time could reduce these fees to \$10-\$20.

Here is a field where the organized County Medical Society might render invaluable services to the community and its practitioners by establishing a completely equipped laboratory, to be run on business principles, on a pay basis, with charges commensurate with the patient's financial standing, compensating adequately all professional workers, and paying interest on the invested capital but without further profits. By engaging an adequate number of technicians and a competent staff of scientific physicians, such a laboratory could serve the needs of the whole county and to a great extent reduce the cost of all laboratory examinations.

The writer feels that such a scheme, rather



than antagonizing the group of laboratory men, might meet with their approval and co-operation. It is not at all unlikely that they would be glad to close their individual costly laboratories; glad to be relieved of high rents, large investment in equipment, technicians and so forth. All of them, if competent, could easily become connected with such a central professional laboratory. The number of various examinations would increase considerably and, in spite of reduced fees for each examination, their aggregate income would not be likely to suffer. Capital for such an undertaking could be raised either among members of the profession, or through some rich men whose interest in such a useful undertaking could be aroused. It is to be expected that by such a scheme, conceived and brought to life by county medical societies, the profession would advance in public esteem.

(3) High cost of hospitalization. It is a fact that the demand for hospitalization has in the past decade considerably increased, partly due to better equipment of the hospitals and more complicated methods of diagnosis, partly to the change in living conditions of the population. But it is also a fact that the cost of hospital care has risen beyond the general rise in other commodities. There are large new hospitals where the patient, paying \$5, \$6 and even \$7 per day, is classified as semi-private; meaning that the total expenses of his maintenance therein are not fully borne by him. And, at that, he is charged separately for laboratory examinations, use of operating room, anesthesia, and so forth. If one considers that on one hand all the patient gets for his money is a bed, limited food and ordinary nursing, often far from adequate; and that, on the other hand, the hospital has no rent to pay, no interest on investment (as all this is supplied by public funds), and no taxes, the high cost of maintenance appears puzzling. It might be because of a tendency of over-expansion, recently in vogue, or due to the fact that general hospitals are being built on the style of luxurious first class hotels, with large amount of space wasted, too many richly outfitted private rooms that are often vacant, and too large an office force. One has a

feeling that the same hospital which runs up a yearly deficit, might, in private hands pay dividends while rendering the same kind of service. This high cost can hardly be explained by the number of free patients, because this number in our private hospitals is not so large, and besides, the hospitals are being paid for the care of indigent patients by municipalities, counties and, in our city, by considerable allotments from the Welfare Federation.

There is a growing tendency among hospital executives to advocate "big business" methods in hospital management. The writer is opposed to these tendencies. He cannot see how hospitals can be compared with industrial productive plants or distributing agencies. Methods in hospital management must be different, must be individualistic and humanitarian. It may be perfectly proper for a hotel to refuse accommodations to a patron unable to pay the fixed rates, but it is not so when a hospital refuses admission to a patient in need of hospital care, who cannot afford to pay more than \$3 per day, on the ground that all the \$3 beds are occupied, while there are a number of higher-priced beds vacant. This is an every-day occurrence and is likely to be the source of discontent and bad feeling toward the hospital and the profession.

One is aware of the complexity of this hospital problem. It is this complexity which is likely to have brought about the organization of the "Committee on Cost of Medical Care". It is up to the county and state societies to determine whether they are willing to wait for a report of this committee or to take the matter in their own hands and appoint their own local investigating committees.

And yet, with all the adjustments which are within the power of the organized profession, and which to a great extent are likely to allay the existing unrest among people and various agencies, and will increase the good-will and respect toward the profession, one realizes that the whole problem of sickness cannot be easily solved. There are other aspects, requiring broader public measures. Sickness will still remain a frequent emergency with which the average wage worker, small salaried man,

small business man, will be unable to cope if left entirely to his own resources. Sickness always was, even with the lowest cost of medical care or with no cost at all, the greatest factor in causing destitution and pauperism. The principle of Health Insurance in the same degree as it is accepted in fire insurance must be recognized, with the important difference that it should not be left in the hands of profit-making agencies. The state seems to be the logical carrier for a health insurance scheme, and it is likewise logical to expect that the state shall carry part of the financial burden. Various schemes of health insurance exist abroad, and it is up to our Commonwealth to work out its own plan in accord with our economic status. It is evident that a proper health insurance scheme will greatly change medical practice. There would not be any more the great prevailing demand on the medical profession to render free services. It would cease to pauperize the people who crowd the innumerable dispensaries. It would decrease the demand for free beds in the hospitals, and the profession, which will be paid for its services by a greater number of people, will be in a position to charge lesser fees to the rich and middle class. Wasn't this aspect admirably brought out by Dr. Linn Emerson in the August number of our Journal?

The writer is not an economist, and he has no intention to go any further than to express

his faith in the principle. Does state health insurance necessarily imply state medicine? We believe not. There does not seem to be sufficient reason why state health insurance may not be compatible with individualistic medicine, regulated by better organized county societies. The state insurance fund might exercise its legitimate control over expenditures through aid of these county societies.

To conclude this possibly too lengthy discourse, I wish to say that it was stimulated by the aforementioned essayists. Like our editor, Dr. Reik, I am tempted to quote the statement by Dr. McBrayer "that every unit of our organization and every member thereof should familiarize himself with the trend of things that affect in any way, either for good or for evil, the practice of medicine". And let us not talk generalities, which are not getting us anywhere, but discuss real, every-day conditions, even if they do affect one or other groups of the profession. Let us be candid in appraising values, as well as in finding faults. The writer hopes to be forgiven for dissenting from the others with regard to the much discussed plan of our Dr. Harris. No one will be more happy than he if this plan will stand a real test in any large community. And, I wish to call the attention of our county societies to the suggested Laboratory Scheme, which to its author, at least, looks practical and worth the efforts necessary to its realization.

## DE PROFUNDIS

BY ROLLO DE CAEN

Out of the depths have I cried unto Thee:

"Lord, hear my cry!"

The answer comes in the smile of a friend

Passing nigh.

Out of the depths have I cried unto Thee:

"Lord, still my wo!"

The answer comes in the voice of a friend,

Comforting, low.

Out of the depths have I cried unto Thee:

"Lord, heal my pain!"

The answer comes in the tears of a friend,

Sympathy's rain.

Out of the depths have I cried unto Thee:

"Lord, make me strong!"

The hand of a friend is laid on mine,

Clasping it long.

Out of the depths have I cried unto Thee:

"Clear Thou my doubt!"

The answer comes in the faith of friends,

Encamping about.

—*The Homiletic Review, New York.*



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if:  
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All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, (address above), Newark, N. J.

## CONTROL OF SPECIALISM

Repeated appearance in legislative halls of the Act to Control Practice of Surgery and the Surgical Specialties suggests the advisability of giving that question more serious consideration than it has yet received within our professional ranks. We were fortunate this year, in so far as legislative course of the Act was concerned, in having it blocked at the very entrance to the Legislature but we cannot count upon always having such an interested and capable friend on guard in the Senate, and we should not throw the whole burden of defense upon our friends in Trenton. If there exists any material abuse of practice in the surgical field it is our duty to ascertain the character and extent of such abuse and to correct any discovered faults, so that the people will have no need for recourse to legislation.

This is by no means a local problem. It is being considered not only in New Jersey and neighboring states but even in foreign countries. The French Academy of Medicine adopted last year a series of regulations quite similar to the requirements for a surgeon's license set forth in the legislation then proposed here. At this very moment the Royal College of Surgeons of England is preparing a fellowship examination to which surgeons in Australia will shortly be submitted as part of the plan for establishing another branch of the College, and those candidates for fellow-

ship are expected to subscribe to a set of rules which include the following:

"(1) The patient, or the person legally responsible for him, must consent in the choice made of a surgeon to perform the operation. It is to be noted that such a consent would be an essential factor in the successful suit by a surgeon for the recovery of his fee.

(2) Having been selected by the patient, the surgeon is personally responsible to him for the operation. He is also responsible for, and shall conduct, the postoperative treatment, except by special arrangement with the patient.

(3) The surgeon must render his account direct to the patient.

(4) The surgeon must not accept his fee for an operation from the practitioner in charge of the patient, unless the surgeon forwards a receipt for the fee received direct to the patient.

(5) If circumstances compel the surgeon to delegate the postoperative treatment of a patient to another practitioner, the latter must collect the fee for so doing direct from the patient. The surgeon must not pay the practitioner in charge of the patient a fee for conducting the postoperative treatment.

(6) Separate accounts for the assistant, anesthetist or other necessary services must be sent to the patient, or the surgeon must state on his account form the exact amounts due for these services.

(7) The assistant's standard fee shall be not more than one-eighth of the operation fee,

or, alternatively, nor more than 5 guineas (\$25). When, owing to special circumstances, the assistant's fee is larger than this amount, the assistant must render his own account on his own account form.

(8) The anesthetist's standard fee shall not be more than one-eighth of the operation fee, or alternatively, not more than 5 guineas. When, owing to special circumstances, the anesthetist's fee is larger than this amount, the anesthetist must render his own account on his own account form.

(9) It is desirable that the practitioner in charge of the patient should be present at an operation on his patient. Should he have to travel any considerable distance for this purpose, the patient must be informed beforehand of the extra fee involved."

It will be observed that the above rules deal mainly with the prevention of *fee-splitting*, while the French action and the proposed New Jersey law dealt chiefly with the *qualifications* of surgeons and specialists. As reported in the February Journal, the New York Academy of Medicine has under consideration a plan submitted by its president, Dr. Hartwell, for some degree of control of this matter by special class recognition within the Academy; the title of "Fellowship" being reserved for such members as can show special qualification. Another plan, or rather, what appears to be a step on the way toward solving qualification by applying the stamp of professional approval, appeared in the January issue of the Journal of the Indiana State Medical Association; consisting in publication monthly of the names of all state society members who are Fellows of the American College of Surgeons, or of the American College of Physicians, or who hold certificates from one of the national boards of examination—those now recognized covering ophthalmology, otolaryngology, and gynecology and obstetrics.

None of the plans thus far disclosed completely or even satisfactorily meets the situation. So, for the double purpose of correcting any discoverable evils and of preventing or avoiding undesirable legislation, we urge the society to make a deeper study of com-

plaints and to formulate a definite plan of action.

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## NEGOTIATING LOANS FOR MEDICAL EXPENSES

The persistence of credit agencies in beseeching our endorsement of schemes for loaning money to patients with which to contract for contemplated surgical operations or to pay for medical services previously rendered, in other words the application of "installment buying" to the practice of medicine, has caused us to keep an eye open for information bearing upon this question. None of the schemes so far presented has seemed to us worthy of approval; even the best of them have held for the practitioner no advantages over means of collection already at his command, and seemed to hold for the patient only another means of borrowing money to pay for things he could not afford.

The national committee engaged in studying the cost of medical care has recently issued a pamphlet covering an investigation of "the use of small loans for medical expenses", which gives us some new light on this kind of borrowing. Among the facts deduced by the investigation are: (1) That 28 persons out of every 100 who borrow from small loan companies do so because of expenditures associated with or growing out of sickness. (2) Interest rates on such loans vary from 12% to 42% per annum. The high cost of such loans is certainly not conducive to a lessening of the high cost of medical care, and physicians should not, for other good and sufficient reasons, encourage the financial victimizing of their patients by usurious interest charges.

Information was obtained from 271 loan agencies located in 135 different cities in 21 different states; incidentally, from 29 agencies in 23 cities in New Jersey. It is interesting to learn that in New Jersey those who gave "medical expenses" as the chief reason for borrowing formed only 11% of the whole number of borrowers, as contrasted with an average of 28% in all the states studied; and, that our 11% was the lowest, and most favorable, score of any state examined.



## LEGISLATION IN THE MAKING

As we go to press this month the General Assembly of New Jersey, session of 1931, is just entering upon the stage of enacting a series of new laws. Under a new plan of procedure, tried out in some measure last year, a date was set for terminating the "open season" for introduction of new Bills—a date later than which no Bills could be introduced save by unanimous consent—and legislators took a recess of 2 weeks' duration for study of newly proposed measures, and to afford citizens an opportunity to do the same. At the session of February 9-10, a great mass of documents was dumped into the hopper; a total of 672 Bills having been presented to the Senate and House as this year's contribution of new offerings.

In this welter of proposed laws we find the "steady-regulars" designed to confer special privileges upon osteopaths and to create a new group of licensed practitioners to be known as naturopaths; also the usual number of provisions that would make it mandatory upon the Board to grant special licenses to "pets" of certain statesmen—pets who have found it difficult to comply with the requirements of existing law. The legislature has more than once rejected each of these proposals, and we believe the same fate awaits the present group.

That one of the Abell Commission Bills which occasioned the profession some concern toward the close of last year's session—the proposition to amalgamate into a single bureau 12 of the special Boards of Examination and Licensure—seems to have been dropped; at least, it has not yet made a re-appearance.

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## IN THIS ISSUE

At the last Annual Meeting one of the most valuable program contributions was the symposium presented by representatives from the several state departments having to do with medical problems. Taken as a whole they supply a comprehensive picture of medical practice as at present conducted by or

under guidance of the state; and possibly the alliance between the state and the profession is closer and its effects more extensive than many of you supposed. Commissioner Ellis' paper is particularly illuminating; and the explanations given by Director of Health Bowen and one of his chief aides, Dr. Levy, help materially to elucidate the development and progress of public health work.

In our travel talk this month we have tried to explain the British National Health Insurance Law—the so-called *state medicine* of Great Britain. As explained there, we are not posing as an advocate of state medicine, not offering even the recently proposed law of the British Medical Association as applicable to these United States, but have attempted to secure and describe an honest, unbiased report of conditions in England with respect to this question. We do think the time has arrived when medical societies should carefully study the development of state medicine in other countries and consider what action the profession of this state and country should take to prevent, or be prepared to take to counteract, imposition of state medicine in an aggravating form.

Next month we shall write of conditions in France.

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## CORRECTIONS

In the reported proceedings of the Tristate Medical Conference, February Journal, an error was made by the printer which may have caused some of our readers confusion; what should have been pages 154 and 155 are published in reverse order. Please make that correction in your copies of the Journal; i. e., renumber the pages and in some manner direct attention to the fact that what was printed on page 155 shall precede what is on page 154.

Furthermore, on page 148, near top of first column, the center headline reading "Message in Rehabilitation Work" should read "Massage"—etc. A mistake in spelling the word "rehabilitation" was corrected in proof-reading but in the process of resetting the type the printer corrected the first mistake and then made a new one.

## Special Article

### MEDICAL TRAVEL TALK

#### A Physician's Vacation in Ireland, England and France

Henry O. Reik, M.D.,  
Atlantic City

(Continued from February Journal)

In preceding letters we promised to submit this month some of the information picked up during the summer regarding the National Health Insurance Act of Great Britain. To reprint in its entirety the original law enacted in 1911 and amendments adopted at various times since, notably in 1913-'20-'22 and '28, together with commentaries upon the working of the law, explanation of the necessity for changes and the effect of such modifications, and then to add even an abstract of the recently proposed substitute, would require a great deal of space and might result in confusing rather than clarifying your concept of the situation. We will, therefore, endeavor to digest both the old and the new plan and to present you with the essential facts correlated in such manner as to give a comprehensive picture of existing and prospective conditions. In order that our statements shall be as accurate as may be, we shall quote only from official documents: (1) The Statutes, Regulations and orders relating to National Health Insurance, published for the Ministry of Health, by His Majesty's Stationery Office, Adastral House, Kingsway, London, 1929. (2) Medical Insurance Practice, prepared by R. W. Harris and Leonard S. Sack, and issued by the British Medical Association for the guidance of health insurance practitioners. We need scarcely explain that the first mentioned book comprises the original law and its amendments, in 133 paragraphs each of which bears marginal annotations of explanatory nature, and such official regulations as have been found necessary in application of the law. The second book is of greater value for our present purpose, because it constitutes an interpretation of the law in the light of all that has happened since its inception 19 years ago.

In September 1922, Mr. Harris, an Assistant Secretary in the Ministry of Health, and Mr. Sack, Barrister-at-Law, both of whom had been associated with the Government's efforts to apply the Insurance Act and make it workable, joined in writing this "book of reference" so that the insurance physician could

have at hand authentic answers to all questions arising in his work. A second edition, made necessary by amendments incorporated into the law, was published by the authors in 1924. Publication of the third edition, in January 1929, was taken over by the British Medical Association, for the benefit of its many interested members, and bears the stamp of that organization's approval. The preface to this most recent edition was written by the Chairman of the Insurance Acts Committee of the British Medical Association, Dr. H. G. Dain, and the first paragraph reads as follows:

"It must to many have seemed amazing that so everyday a matter as the doctoring of a person could have produced or required such a mass of regulations and terms of service, but the present conditions are the outcome of experience and necessity. Consideration will show that the need for so complicated a system is brought about in the main when the service rendered by the doctor to the patient is provided and paid for by a third party who is never present when the service is rendered, and by the insistence of the medical profession on the right of every registered medical practitioner to go on the panel, if he wish, and on the right of free choice by both doctor and patient. For these fundamental principles we pay in complicated regulation."

Half-submerged in that paragraph is a phrase worthy of special attention by those of us who have been fearing the advent of *state medicine* in this country. Recall the facts that the Association strenuously fought against acceptance of this law and a large proportion of its members refused at first to enroll for service, and then note the present "*insistence of the medical profession on the right of every registered medical practitioner to go on the panel, if he wish*"; and ponder on the changed attitude.

At present the law is limited in application to about 15,000,000 persons—embracing only persons, of either sex, above 16 yr. of age employed in manual labor or in other labor for which the remuneration is not more than £250 (\$1250) a year; and a small group of persons who because of previous alliance with other health insurance schemes are permitted to hold over as "voluntary contributors" to this plan.

The insurance benefit fund is provided through contributions by the insured employees, their employers and the state. In the original scheme the fund was to come—"as to seven-ninths from contributions of the employed person and the employer, and two-ninths from the Exchequer", but numerous changes have been made as necessity required an increase of the total fund, and consequent increase in the per capita assessment, until at present "a sum of 13 shillings (\$3.25) per an-



num is ear-marked by statute for medical benefit (average per person), \*\*\*\* and "the contribution of the Exchequer (toward this 13 shillings) is one-seventh in the case of men and one-fifth in the case of women". If we study the figures for a fiscal year, which take into consideration interest earnings, etc., it will be seen that each 13 shillings' item is secured by assessing the employer for one-third, and the insured laborer a trifle less than one-third; or, in simpler language, the employee secures health insurance at a cost of approximately 4 shillings (\$1).

Enforcement of the Act is under direction of the Minister of Health, but practically all normal negotiations with the insured are carried on through "approved societies"—insurance companies, as it were—with whom the Government has contracted to look after such details.

The benefits provided for insured persons comprise:

(1) Medical treatment and attendance (called "medical benefit"), including proper and sufficient medicines and chemicals as may be prescribed, and surgical dressings and appliances; but does not include obstetric attendance or treatment.

(2) Periodic payments while incapable of work because of some disease or bodily or mental disablement, for a period not exceeding 26 weeks (called "sickness benefit").

(3) In the event of disease or disablement lasting longer than 26 weeks, payment of a "disablement benefit" during continuance of incapacity for work.

As will readily be seen, the above provisions make it necessary that the attending physician shall furnish:

(1) Medical attendance and treatment such as is expected of a general practitioner.

(2) The prescribing of proper and sufficient remedies.

(3) Prescribing or supplying suitable surgical dressings and appliances.

(4) Keeping of accurate records and furnishing if and as required certificates of disablement or incapacity.

We may be forgiven for saying at this point that the last mentioned requirement has been the cause of more trouble than all the others combined. Physicians, everywhere, just *love* what in the army they called *paper work*. No group of people understands better the necessity for and the value of accuracy in small things; and no group has a greater dislike for the task of making and preserving accurate records.

*Who may practice?* In theory, at least, this

service might have been rendered by full-time salaried medical officers, or it could have been entrusted to specially selected part-time general practitioners, but, in fact, "Parliament decided to throw this service open to the whole medical profession and accepted the basic principle that *every qualified medical practitioner is entitled to treat insured persons*", provided that he has not been disqualified by misconduct.

Any qualified medical practitioner (in effect, that means any member of the British Medical Association in good standing) can share in the insurance practice by merely expressing the wish and signing the roll of The Panel, more formally called "The Medical List".

Here let us again pause for comment. In confiding this work to properly qualified, licensed, registered physicians, and in otherwise placing all professional matters under control of the regular profession, Parliament and the Health Ministry knocked the props almost completely from under the *cults*. Furthermore, you may have noted that the panel doctor is only required to serve as a *general practitioner*; he is not expected or required to act as a specialist in any branch of medicine or surgery. In practice, that provision has helped materially to solve the problems involved in fixing a dividing line between general and special practitioners. The insurance Act provides for consultations and for referring patients to surgeons or other specialists, but as it does not provide payment of panel doctors for work out of their proper sphere they are not tempted to perform any operation except those required by emergency—and small emergency operations are recognized and compensated for when properly attested.

*Selection of Physician.* "Every insured person is entitled to medical treatment, within the range of service provided, whenever and wherever required (in Great Britain). The insurance doctors in any area have a collective responsibility for the medical treatment of every insured person in the area who applies for it."

As previously indicated, the worker registers with and pays dues to an insurance company—"approved society"—and receives a card of identity, which card he takes to the *physician of his own choice*, and, if acceptable to the latter, registers upon that physician's panel. The chosen physician is, however, entitled to refuse to accept the applicant, and in that event the Insurance Committee will aid the insured person in selection of or assignment to another physician. The only *obligatory* acceptance of a patient deals with the rendition

of service in an emergency. There are elaborate provisions covering every possible exigency that may arise to disturb the relations of physicians to patients, and in dealing with such problems, as with all other problems associated with application of this law, the medical profession is adequately represented on the committee of adjustment.

*Limited Size of Lists.* "As a limit to the number of insured persons, well and ill, for whose treatment an insurance doctor can undertake responsibility, a maximum of 2500 insured persons is fixed and no single-handed insurance doctor may ordinarily have more than this number on his list. \* \* \* Where 2 or more doctors carry on a practice in partnership, any one of the partners may have up to 3000 names on his list, but the average of the lists of all the partners must not exceed 2500."

Keep in mind that the above mentioned figures *do not mean 2500 patients*; they only mean 2500 persons any of whom may become patients at some time. Save during epidemics, there is rarely more than 1% of such listed persons ill at any given time.

*Payment for Services.* Various methods of payment were considered—such as payment by salary, payment for number of cases treated, payment by a fee system according to character of services rendered—but it was finally decided to pay on a per capita basis of the insured population, well and ill. So, at the beginning of each year the department sets aside a specific fund based upon an estimate by the Government Actuary of the number of insured persons multiplied by the agreed capitation fee. The gross fund available for medical service is then apportioned among the counties or boroughs, according to respective proportions of insured persons, and allotted to physicians in accordance with the relative number of persons on the list of each. There is also an apportionment to pharmacists, to cover prescriptions filled and appliances furnished, and an additional fund to cover medicines and supplies furnished by physicians in areas where pharmacies are not available. The distance a physician may have to travel to care for a patient is also taken into consideration and he receives mileage for all calls beyond a certain distance from his office.

It might be expected that incomes from this source would vary considerably, and we assume that they do, but we were told that the average income from this insurance work in manufacturing districts, where laborers are naturally congregated in largest numbers, is approximately £1000 (\$5000) and that incomes of £1500 are not uncommon. We cannot vouch for the accuracy of those figures; they were proffered, in fact, as estimates, or guesses, but by individuals who were or had been in positions that enabled them to make a

"reasonable" guess. We can, however, offer some figures from a reliable source and applicable to the entire country.

The Eleventh Annual Report of the Ministry of Health, covering the year 1929, shows that there were 14,000 physicians on the panel, and that they received the sum of \$31,250,000 in respect of their duties of attending and treating insured persons; the insurance roll for that year numbering a little over 14,000,000.

Those figures would indicate an average of \$2232 for each panel physician in the entire country; not a bad average income from one single line of practice. In addition, the treasury reports, for the same period of time:

"About \$1,000,000 was paid to country doctors on account of mileage, another \$1,000,000 was paid to doctors for medicines and appliances supplied by them as part of emergency treatment or dispensed in country districts, and \$50,000 was set aside to enable country doctors to attend courses of post-graduate study and to provide them with other desirable facilities (maintenance of telephones, motor cars, branch surgeries, or reasonable vacations)."

*Some details of service.* When a physician signifies his willingness to register on the "Medical List", for health insurance service, he receives along with notice that he has been enrolled a copy of the List of Insurance Pharmacies, a supply of prescription blanks, record cards, certificates of illness or incapacity, and other regular forms.

The general standard of treatment required is that which one would observe in his private practice as a general practitioner.

Every formal complaint, or any other formal question arising between a physician and an insured person, is required to be investigated by a body composed of an equal number of medical men and of insured persons' representatives, with an independent chairman—the Medical Service Subcommittee of the Insurance Committee. There is a subsequent right of appeal to the Minister.

In complaint cases an insured person's Approved Society may be permitted to assist him in the presentation of his case; the Society itself may be the complainant in certification cases; but, apart from this, and excepting certain details of certification procedure, you will find that your only relations with Approved Societies are those of an informal nature in which the officials communicate with you on behalf of members. Such informal communications are all to the good—particularly where an illiterate member is concerned—if on both sides it is recognized that the communications have no official footing.

For purposes of local administration of Medical Benefit, each country is divided into areas, one for every county (in Scotland,



areas are amalgamated in 2 or 3 instances) and one for every county borough, and in each area there is set up an Insurance Committee, responsible to the Minister, for the administration of medical benefit within its area.

There are also set up in each area: a Local Medical Committee, representative of doctors generally who are resident in the area; and a Panel Committee, representative of the insurance doctors who are under agreement with the Insurance Committee.

In his relation to insurance doctors, the Minister is placed in a somewhat unusual position. While he is responsible for the spending of public money on the administration of medical benefit, he has not the customary powers of selecting the persons by whom the work is to be carried out—every qualified doctor having, as already explained, the right to treat insured persons.

The Minister, is, however, entrusted with the responsibility for the issue from time to time of the Regulations, etc., which define the insurance practitioner's Terms of Service. He must also, in view of his responsibility to Parliament, have some check on the way in which these doctors carry out their obligations. But the Regulations afford evidence that the Minister in the exercise of his powers under the Acts is relying more and more on coöperation of the medical profession, especially where professional questions or professional conduct are at issue.

In this connection his main concern must be that the committee coming to discuss matters with him must (1) have the necessary mandate, and (2) if undertakings are given, be in a position to secure that they are carried out. The body which is recognized by the Minister as the representative body is the Insurance Acts Committee of the British Medical Association, and all questions affecting remuneration or other Terms of Service for insurance doctors, have always been made the subject of consultation with this representative body, and Ministerial undertakings have been given that this course will continue to be pursued.

Panel Committees are required by the National Health Insurance Act to be set up, and Insurance Committees are directed to ascertain through these bodies the opinions and wishes of insurance doctors, wherever these are required to be ascertained by the Act or the Regulations.

The Panel Committee can require that the Medical Service Subcommittee shall investigate any question relating to the administration of Medical Benefit or to the discharge by an insurance doctor of his duties. It has also the duty of adjudicating in cases where there

is *prima facie* evidence of extravagant prescribing by a doctor.

The scheme of National Health Insurance does not, it will be seen, provide for "specialist services", i.e., services which are ordinarily beyond the skill or experience of general practitioners. Questions of importance, and often of no little difficulty, may, therefore, arise as to whether a particular operation or service which an insured person admittedly required falls within the definition of general practitioner treatment quoted above.

The Regulations provide that, where a question of this nature arises, it is to be referred to the Local Medical Committee, and if that Committee and the Insurance Committee—on considering the Local Medical Committee's report—fail to agree, it is to be submitted for decision to 3 Referees, appointed by the Minister, 2 of whom must be doctors, the third being a barrister or solicitor in actual practice.

*Emergency Treatment.* In case of an emergency the doctor is required to render whatever services are in the best interests of the patient, having regard to the circumstances. In other words, the test must be solely what treatment, within his capacity, the patient urgently requires. Thus, cases of great urgency may arise, more frequently in country districts, "where the risk to the patient, through your undertaking an operation which, in other circumstances, would better be left to a specialist, is less than the risk entailed by delay".

The general capitation fee, paid for the treatment of insured persons in town and country alike, covers professional services and practice expenses. It therefore includes payment for a certain amount of traveling. Doctors who practice among insured persons in rural and semi-rural areas receive an extra payment in connection with work done (1) beyond 2 miles from the doctor's residence or main surgery, and (2) in districts which present exceptional traveling difficulties. This extra payment is one which takes account both of the time occupied in traveling and the cost of traveling.

Insurance premiums are paid to the doctors in the Insurance Service for every insured person in the country, well and ill, and the remuneration of every practitioner is provided for in the Distribution Scheme for the area in which he practices. "Accordingly, the Regulations provide that you must not demand or accept any other payment for giving treatment, within the range of service laid down by the Terms of Service, to any insured person who is on your list, or who represents to you that

he is an insured person except by way of deposit, in cases of doubt."

*Criticism of existing plan.* As already stated, in the beginning, this law was strongly opposed by the medical profession. Nearly all physicians looked upon it as an unwarranted interference with their legally established professional and business rights, and many denounced the general plan as a socialistic experiment fore-doomed to failure. Prediction was made that if it should happen to succeed to a recognizable degree it would, nevertheless, prove detrimental to the public and degrading to participating physicians; these dire prophecies being based upon the fear, or expectation, that the service rendered could not or would not be up to standard, and that through such a lowering of professional service physicians would themselves deteriorate. There was even talk of a "strike"—of medical men refusing to have anything to do with this new form of "contract practice".

Well, like many other horrors, these were disposed of with less difficulty than had been anticipated. Sober second thought must have convinced many objectors that (1) the oft-repeated experiment of holding back the tides with a broom had never yet succeeded, and (2) that their fears of professional deterioration—in practice and in reflex effect—were not flattering to themselves. At any rate, 14,000 physicians in England, Scotland and Wales are now "on the panel", and our inquiry as to how the organized profession now feels about it brought the response that: "If submitted to the British Medical Association for a vote, the question of supporting the present health insurance law or having it abolished would bring out a tremendous majority in favor of existing conditions, because it has benefited both public and the profession."

In recent years criticism has taken the form mainly of charges that some bad results have accrued, or may yet develop. For instance: excessive prescribing of extravagantly expensive drugs; malingering, encouraged by doctors who may be too easily induced to sign certificates of disability or incapacitation; repetition of the fear that the profession will ultimately suffer a slump in scientific output as an indirect result of slothfulness that some consider a natural development among those engaged in contract practice or institutional work.

We sought factual information upon those points. There have been many instances of malingering and some cases of certificate falsification and of improper prescribing. There is some evidence that malingering exists among the insured (especially among married women under 45 years of age) to a greater extent

than among people of the same class in other comparable countries or in Great Britain prior to enactment of the insurance law. Advocates of the insurance scheme are, however, quick to point out that all the above mentioned complaints and objections are criticisms of human nature rather than of the law; that the bad results, where proved, are due to moral defects and obliquities on the part of some patients or some physicians, and do not constitute any more serious criticism of this law than do evasions of other laws justify their condemnation.

Inquiry through medical channels elicits, as might be anticipated, the prompt denial of professional abuses on any large scale; admitting that a few panel physicians have been guilty of aiding and abetting malingering, and of abusing prescription privileges, it is claimed that the total number of such transgressors constitutes but a small percentage of the whole number of panel doctors. Honest panel physicians also point out the fact that moral delinquency is not an unknown occurrence among physicians engaged solely in private practice. In so far as the medical profession is concerned we may safely conclude that the percentage of wicked physicians is not higher among those engaged in state medicine than among those occupied with private practice alone; that the number and the percentage of wicked workers in either group is very small; and that such abuses of the law as have grown out of too great complacency on the part of physicians—whether to favor patients or pharmacists—are reflections upon human character rather than justifiable criticisms of the law.

There is apparently mighty little complaint in England as to the quality of service rendered by panel doctors; and that is not only what we would expect but speaks well for the honor of our profession. The people appear to be satisfied; the Government seems to be satisfied; in fact, the opinion seems to be general that the class of people insured is now better cared for medically than ever before, and that physicians are now paid for services which formerly they were compelled to render mostly on a charity basis.

The intimation that physicians, as a group, will render a lower grade of service to panel than to private patients, and the fear that any considerable number of physicians will lose interest in medical science just because they happen to be engaged in what somebody has called wholesale, as compared to retail, practice, are propositions that seem to us unworthy of discussion; indeed, they can hardly be discussed without first accepting fundamentally the implication that the medical profession is



composed largely, if not in the main, of greedy, grasping, reward-seeking individuals who base the quality of their service upon the amount of pay to be derived and who have no other interest than a selfish financial one in the progressive development of themselves and their science—and those are allegations that all history denies.

Control of excessive or extravagant prescribing, and of improper certification of illness or incapacity to work, is to a certain extent in the hands of our profession's representatives upon the various committees executing the law and in the British Medical Association.

The extent of malingering is in a manner indicated in the Health Ministry's Annual Report previously referred to:

"The number of references to regional medical officers for advice as to incapacity for work in 1929 was 410,903 (408,934 from approved societies, 1079 from insurance doctors, and 890 from insurance committees). Of these references 133,707 (or 33%) related to men and 277,196 (or 67%) to women. The number of persons actually examined on 'incapacity references' was 211,634. The number who declared themselves *off the funds* before the date fixed for examination was 109,661, and 89,750 failed to attend for other reasons. Of the persons examined 143,898 were reported as incapable and 67,736 as not incapable of work."

The above figures show that practically one-half (49%) of all malingerers who carried their claims to the point of demanding a certificate of incapacity were eliminated by the expedient of requiring submission of the question to a referee. Of the number submitting to reference examination, approximately two-thirds were found to be actually incapacitated and one-third to be malingerers; which, in turn, indicates that only about 35% of the original claimants was sustained, and 65% was weeded out.

Before leaving this portion of our letter—this summary of such facts as we were able to glean from a cursory study of the law operating in Great Britain—let us say emphatically that we have not attempted nor meant to advocate, or argue in favor of, establishment of so-called state medicine here. We have tried to ascertain the facts concerning national health insurance in Great Britain and to present those facts in logical sequence and in an unprejudiced manner; at the same time presenting such answers as were vouchsafed us with reference to criticisms. We confess to having been aggravated many times by statements published in various American medical journals—statements which we felt certain were misrepresentations, or unjust charges, or unfair deductions and inferences—and it is possible that we have exhibited the reaction

effect of such an influence. It is difficult, for us at least, to present any debatable question with absolutely perfect impartiality. Herein, we have tried to present both the facts and the explanations without bias, even when emphasis seemed necessary, but we have been conscious, too, of a feeling that the facts, in their strongest form, had best be faced. If there is either a threat or a natural prospect of state medicine coming soon for consideration here in New Jersey, or in any of these United States, we cannot afford to blink the facts; and in our humble opinion the wisest preparation for dealing with the problem consists in first learning all we can about the experiences of other countries.

STAND OF THE BRITISH MEDICAL ASSOCIATION AS REGARDS THE FUTURE

Whatever opposition the British National Health Insurance Act encountered in the beginning, and whatever criticism may be directed at it now, it is a noteworthy fact that the *British Medical Association has recently submitted to the Government a proposal to extend that law*—with slight modifications—to embrace the entire populace and to cover medical practice in all its varied aspects. The proposed plan includes preventive as well as curative medical service; treatment by specialists as well as by general practitioners; hospitalization and convalescent provisions as necessary; auxiliary service in the line of radiography, electrotherapy, physiotherapy, hydrotherapy and massage; mental disease institutions and maternity homes; infant welfare and school inspection; coördination with public health departments; and all to be available to the indigent as well as to those who can pay in part or in full for health insurance. It is a thoroughly comprehensive scheme. And this is the result of 19 years of observation, study and experience on the part of the physicians of Great Britain. If adopted, the plan would not entirely destroy private practice; while all physicians would be eligible to state practice, none would be forced to take part, and persons desiring to employ private, nonparticipating, practitioners—general or special—would be at liberty to follow their own bent.

The single modification of the existing law asked for, in so far as we have discovered, is that provision shall be made for direct contact between patient and physician instead of negotiations through any third party—meaning the "approved society".

"That the interposition of any third party between the doctor and the patient, so far as actual medical attendance is concerned, shall be as limited as possible. In the first place, the relations between doctor and patient are

so intimate that both doctor and patient rightly resent any outside interference. Such interference is bad for the doctor and worse for the patient. It is bad for the doctor because his whole training and the traditions of his profession tend to foster the idea of personal responsibility, and this can be undermined only at the risk of rendering the doctor less efficient. It is worse for the patient, because, *ex hypothesi*, he or she is a sick person whose cure depends very largely on complete confidence in the doctor, and this confidence is built up to a great extent on psychologic factors which are disturbed by the intrusion of outside agencies. The Association pleads on behalf of the poorer section of the community that they should have the same consideration in this matter as is demanded as a matter of course by the more wealthy sections of the community. There is no more reason why any third party should come between the patient and his medical adviser than between the individual and his spiritual adviser.

The experience gained from the National Health Insurance system has shown that the interests of the public are best served in any organized medical service by putting as much responsibility as possible on the doctors giving the service—responsibility, that is, for the quality of the service and for its smooth working. There are no severer critics of delinquent doctors than a body of their own colleagues invested with the control of purely professional affairs. And there is no surer and easier way of securing an efficient service than to enlist the active interest of those whose reputation as a profession is involved in the way in which they exercise collective responsibility entrusted to them."

In sponsoring the proposition, the Association further says:

"During the past 20 years the attention of the public has been directed more than ever before to the subject of 'The Health of the People.' Many factors have led to this increase of attention. The systematic medical inspection and treatment of school children; the National Health Insurance system and the varied experience gained from it, including the striking evidence as to the loss of millions of weeks of work in a year owing to ill health among the insured population; the establishment and the activities of the Ministry of Health; the devastating influenza epidemics; the experience gained from the operations of the maternity and child welfare schemes of the local authorities; public inquiries into different aspects of the question, such as the reports of the Consultative Medical Councils in 1920, the Report of the Royal Commission on National Health Insurance in 1926, and, more recently, the inquiries into the subject of maternal mortality; the increasing interest in the subject taken by the press—all these have combined to make the problem of how best to promote the health of the people one of the most interesting and pressing public questions of the day.

The British Medical Association, as a body representing the great majority of doctors in this country and in the British Empire, has not been inactive all this time. It has indeed, been busily engaged in studying in detail various aspects of the question, with the object, first, of eliciting the views of the main body of the profession and then of focusing those views into practical schemes. Many of these sectional schemes have been placed before the Government; some, such as the recent plan for dealing with maternal mortality, have been given wide publicity. The Association now feels itself to be in a position to piece these plans together and to submit to the public a coherent and inclusive scheme of medical service based on a few simple basic principles. This scheme would, it is believed, provide the community with a service available for every class of the population, comprehensive enough to cover the whole field of preventive and curative medicine, and sufficiently elastic to permit of further developments as these may be found necessary. As the Association said in a pamphlet published in 1918, stating its views as to the way the new Ministry of Health should work: 'The system of medical provision which the Ministry of Health should seek to establish is one which would give to all who need it every kind of treatment necessary for the cure or alleviation of disease, and would utilize for this purpose every class of medical practitioner.'

A comparison of the National Health Insurance system of this country with those of other countries shows that the quality of the service given here is in many ways superior to that of many other countries, and certainly there is a more contented service, mainly because the management and control of the purely professional side of the work and the disciplining of the doctors connected with it have been increasingly entrusted to the profession itself."

(To be continued.)

## Medical Ethics

### THE PHYSICIAN IN HOLY WRIT

John Hammond Bradshaw, M.D., F.A.C.S.,

\* Orange, N. J.

Every book dealer will tell you that the Bible for many years has been the "best seller". To be mentioned over a score of times, in different places, in such a work, and in a generally complimentary way, is an accomplishment no profession other than medicine has achieved. Without entering into the subject of inspiration of the Scriptures, we know that they are classified by scholars as belonging to the world's best and oldest literature. The authorship and the first allusion in the Bible to a physician dates back, we may safely say, 10 centuries before Christ. This is found in Genesis 50:11, "\* \* \* and the physicians embalmed Israel." This is not mentioned



alone because of its antiquity, as 20 centuries before this physicians were known in Egypt.

The Bible was an unwritten book at the time of Esculapius. It is gratifying to our pride to be told that Esculapius was the son of Apollo and that Homer mentions the fact that 2 of his sons were physicians in the Greek Army at the Siege of Troy, for we like to think of Esculapius as the head of our clan. Of course Hippocrates was a "modern" by comparison.

Aside from these reflections, it is interesting now to go back to the Bible.

*II Chronicles 16:12*: "And Asa in this thirty and ninth year of his reign was diseased in his feet, until his disease was exceeding great: yet in his disease he sought not to the Lord but to the physicians."

We are naturally elated at the above passage until we are knocked flat by:

*Job 13:4*: "But ye are forgers of lies, ye are all physicians of no value."

Job, you know, was not himself when he said this; he not only had a most prolific crop of boils, but had been through a stock-market crash. When his friends sweetly told him this was all because the Lord loved him so much, it was more than he could stand, and his doctor's head was the nearest within reach.

Now when we come to

*Jeremiah 8:22*: "Is there no balm in Gilead: is there no physician there? Why then is not the health of the daughter of my people recovered?" We know that Jeremiah was growing old. Many a modern, and not very old at that, has raised his voice and reached out his hand for some "balm in Gilead". It is the cry of the world, and antedates even Jeremiah.

There may be other references to physicians in the Old Testament, but the writer has overlooked them.

Our Lord mentions physicians many times. Our calling him "The Great Physician" confers honor upon ourselves.

*Matthew 9:12*: "But when Jesus heard that, he said unto them, They that be whole need not a physician, but they that are sick." The philosophic truth of this statement being so apparent, we are quite likely to miss its absolute profundity.

Here is a passage especially built for the gynecologists:

*Mark 5:25-26*: "And a certain woman, which had an issue of blood 12 years,

"And had suffered many things of many physicians, and had spent all that she had,

and was nothing bettered, but rather grew worse. . ."

But this does not refer to modern times or modern physicians, although we must admit that a certain part of this passage is a little pointed.

Here is an interesting verse:

*Luke 4:23*: "And he said unto them, Ye will surely say unto me this proverb, Physician, heal thyself: whatsoever we have heard done in Capernaum, do also here in thy country."

It would be a good thing if we all could take this verse to heart. The trouble is, however, that *we do not think we need to be healed!*

Here is a passage so often quoted, it is good to know its source:

*Colossians 4:14*: "Luke, the beloved physician, and Demas, greet you."

It is well to close this short article with a few verses from *Ecclesiasticus 38*, the poetic beauty of which is acknowledged by all.

*Ecclesiasticus 38*: 1. Honour the physician for the need thou hast of him: for the most High hath created him.

2. For all healing is from God, and he shall receive gifts of the king.

3. The skill of the physician shall lift up his head, and in the sight of great men he shall be praised.

4. The most High hath created medicines out of the earth, and a wise man will not abhor them.

5. Was not bitter water made sweet with wood?

6. The virtue of these things is come to the knowledge of men, and the most High hath given knowledge to men, that he may be honored in his wonders.

7. By these he shall cure and shall allay their pains, and of these the apothecary shall make sweet confections, and shall make up ointments of health, and of his works there shall be no end.

8. For the peace of God is over all the face of the earth.

9. My son, in thy sickness neglect not thyself \* \* \*.

11. \* \* \* then give place to the physician.

12. For the Lord created him: and let him not depart from thee, for his works are necessary.

13. For there is a time when thou must fall into their hands:

14. And they shall beseech the Lord, that he would prosper what they give for ease and remedy \* \* \*.

## Esthetics

### APPRECIATION OF GOOD MUSIC

#### *America's Orchestra Abroad*

(Editorial in N. Y. Herald-Tribune, June 5, 1930)

It was Nietzsche, that mystic realist, who declared, with an audacity which the wise will not too hastily rebuke, that "we have our highest dignity as works of art, since it is only as esthetic phenomena that existence and the world are eternally justified". Not many Europeans have been willing to credit modern American civilization with the distinction of illustrating that profound truth. Americans, indeed, have somewhat uneasily suspected that their civilization is misprized by Europeans chiefly because of its supposed emphasis upon other things than the dignity and beauty of life.

This estimate of the measure of American enlightenment may have been subjected to a process of revision in the minds of thoughtful foreigners by consideration of the remarkable European tour which the Philharmonic Symphony Orchestra, of New York, under the direction of Arturo Toscanini, has just concluded. That tour, which carried the oldest of American orchestras and its illustrious conductor over the length and breadth of the Continent to a resounding finale in London, has been made to an accompaniment of popular and critical acclaim unprecedented in the history of musical tournées accomplished without benefit of jazz bands, prima donnas, or tenors excitingly equipped with high Cs. For the Philharmonic Symphony's tour, let it be remembered, placed no dependence upon sensational appeal. There was nothing sensational about it save musical excellence. The "attraction", as professional showmen would call it, was merely an orchestra of consummate quality, playing standard concert works, under a conductor who is the personification of esthetic simplicity, sincerity and high-mindedness.

And what hoped-for recompense can have been in the minds of those reckless American Maecenases who sponsored the formidable undertaking? Surely nothing more alluring than the certainty of being out of pocket some hundreds of thousands of dollars; nothing more tangibly rewarding than the possibility of suggesting to an Old World racked and discordant that in place of those "dark sayings in a thousand tongues" which have long confused it, the New World was prepared to speak to it in the tongue of an ideal confraternity—in that transcendent form of human utterance which is essentially, as one of the

greatest of music-makers knew and said, "only a means by which one may talk with one's fellows".

## Collateral Reading

### ON AN ANTHOLOGY OF CHESTNUTS

By the Shop Philosopher

(The Kalends of The Williams & Wilkins Co.)

Insufficient attention has been given by the literati to the lowly chestnut. It is too hastily dismissed as a trivial and unworthy form of literary expression, the mere plaything of raconteurs, particularly those of small skill who nevertheless view what skill they have with complacency, or of desperate editors of the scissor variety, the exigencies of whose office compels them to leave no glaring hiatus in their columns. The chestnut is good only for a passing smile, a quick guffaw—that is the casual view; a view I venture to believe, which offers opportunity for revision upward.

For observe you this: the chestnut is a true exemplar of folk-lore; folk-lore in the making. It is impossible to trace authorship. Chestnuts spring full panoplied from some mysterious splitting of the rocks. They emerge from the hodge-podge of hurrying human atoms, particles thrown off from the boiling pot of social interactions, products not of one imagination but of many, having phylogenesis rather than ontogenesis. And while by far the greater portion of this spontaneous excrement must of necessity be wholly dross, a modicum of precious metal is also found.

Now being distilled of human life itself, it follows that the chestnut (when it rises above mere wise-cracking, when it is genuine and not an imitation strained after by one under the compulsion of filling a minute of time or an inch of space) at the very least must capture some tidbit of human nature; and at the most may come close to a sublime summation of the whole of it. For so-called nonsense is far more likely to be profound than are the gaunt vaporings of those with the presumption to match wits with the infinite. So, I hope that some scholar, with the requisite balance of scientific thoroughness and poetic intuition, will give the world an anthology of chestnuts. It is a far more reasonable undertaking and far more likely to be fruitful than Dr. Wilstach's compilation of metaphors.

It is unnecessary to say that the anthology must represent something other than one individual's idea of what is funny. *Imprimis*



the stories must *be* chestnuts. The good story, new last week, may not have staying qualities. Each must demonstrate its validity by its vitality. For that vitality demonstrates that at least the anecdote has found a responsive chord in many bosoms; the presumption is raised that it belongs to the warp and woof of the human fabric. That presumption must be tested against the compiler's intuitions and experience; for the carefully selected chestnut must have the human quality. Then it must have subtlety and the flavor of the epigram. And finally, of course, it must have true elements of humor—indirection, incongruity, surprise or any like factor which titillates the risibilities.

As a beginning, hardly more than a hint, a few candidates for admission are appended.

The teacher picked on Johnny to demand, "What is the shape of the earth?"

"Round", said Johnny promptly.

"How do you know?"—explosively.

"Oh, all right, it's square then."

May the tribe of Johnny increase! And may the tribe of those wretches who forever are challenging our faiths, opinions and preferences, who forever are scheming to "sell us the idea", who forever are laying traps for us, causing us to commit ourselves that they may smackingly show us how mistaken we are, burn forever in a specially constructed hell where they will be slowly argued, debated and talked to a crisp!

Zeke was a country boy, and ambitious. He decided to study law. Preliminaries arranged, he left home on a Monday. He returned the following Friday.

"Lo, Zeke", an acquaintance hailed, "How do you like the law?"

"Don't like it" said Zeke positively. "I'm sorry now I learnt it."

This is a study in intonation. The night before an engagement the Irish sergeant endeavored to inspire his men. He explained what was to take place. Then ensued this colloquy:

"Bhoys, will yez fight or will yez run?"

"We will!"

"Will what?"

"Will not?"

"That's the spirit, bhoys; I knew yez would."

The eccentricity of the inebriated is a fruitful source of chestnuts. Few indeed however have the superb balance of this one:

Two are seated in the smoking compartment of a Pullman car. Says one, "What time is it?"

The other gropes shakily into a waistcoat

pocket, discovers his watch, consults it painstakingly, and announces at length, "'S Thursday."

"Y' don't say!" returns the First Inebriate *agitato*. "I'll have to leave you. 'S where I get off."

Speaking of potations, this is the choicest example of morning-after story that has come to my knowledge:

The hero awakens in a state of utter physical and mental disrepair, but at least in familiar surroundings. It is his own room and his pet kitten is meandering across the floor.

"Great Scott, cat", moans the sufferer, "don't stamp your feet so!"

That, my friends, is some headache.

And I love the absent-minded professor who scratched his pancake and poured syrup down his neck.

In the days when the genus taxicab was not so conspicuously marked as at present, a man emerged from a building on lower Broadway, and finding a car at the curb with a driver, he got into it and directed: "Grand Central Station."

Now it chanced that the car was not for hire; but the driver, having nothing better to do, fell into the rôle so unexpectedly assigned him and drove his fare in accord with the directions. Arrived at the station the fare said, "What's the damage?"

"Twenty-five cents."

"What? Making a mistake, aren't you?"

"No, sir. That's all we ever get for this trip."

"And that dirty bum yesterday soaked me 2 bucks!"

It would take a lengthy essay to elucidate the human nature in that.

The proud owner of an ancestral "place" near London was showing a visitor about. In due course they came to the family portraits.

"My great uncle" said the host standing before a canvas. And added in that tone of voice which demands that the auditor be awestruck and break into wordless exclamings—"Lost a leg at Waterloo."

*The Visitor*: "Beastly place, Waterloo. Lost me golf-clubs there last week."

It is said that President Lincoln in the first days of his term of office when he was tortured with a pertinacious horde of office-seekers, was especially annoyed by 3 particularly importunate ones, who always came to him in a group. Standing one day before a window which commanded a view of the street below, he turned to a *vis-a-vis* and told this story:

"When I was a boy in school the reading lesson was carried forward by using the Bible

as a vehicle. The practice was for each member of the class to read a verse in turn.

One day we read the story of the burning fiery furnace from the Book of Daniel. To little Ebenezer fell the verse in which first occurred the names of Shadrach, Meshech and Abednego. Eb stumbled on Shadrach, was staggered by Meshech and fell entirely to pieces on Abednego. He was reprimanded by the teacher and promised a spat with a ruler unless he improved.

The reading proceeded, almost all the way around the class again. Suddenly Ebenezer broke into noisy tears. The reading was interrupted while the teacher endeavored to ascertain the cause of Eb's lament. Eb pointed to the verse which would, by rotation, fall to him. It contained the fateful names again."

The President paused and called his companion to the window indicating the approach of the particularly unwelcome visitors.

"What Eb said then is what I say now", Mr. Lincoln continued, "Here come them same damn 3 fellers."

One of the compensations of the Great War was the number of excellent tales it produced. There was the better 'ole story, as a classic instance, which Bruce Bairnsfather has made immortal. It is certainly no better, however, and I think not so deliciously subtle as the following:

A company of Tommies was detailed to guard a certain road and ambush a German patrol which was confidently expected. The instructions were to capture the patrol if possible, to scatter it and disintegrate it as a second choice, but if necessary to annihilate it. The Tommies in general regarded the last alternative as the most certain to accomplish the required end, and set themselves in array accordingly.

Midnight came and past. One o'clock. Two. The patrol was long hours overdue. Three o'clock came; then 4 and still they waited. Finally, a voice, filled with concern, was wafted through the inky darkness:

"I 'ope as 'ow nothin' 'as 'appened to the beggars!"

And that reminds me. The surviving contingent of the G. A. R. in a western town planned and carried out a successful celebration. It was a large and noteworthy affair and the editor of the local paper produced a special edition in honor of it.

On publication he was horrified to discover that in a fervid and sentimental editorial on which he had expended his most flowery rhetoric an egregious typographic mischance had caused him to allude to "*the battle-scared veterans*".

Mortified beyond measure he took firm action to recover every copy of the luckless edition. He sent out boys to canvass the entire community, extending their activities into the neighboring country for miles around. He recovered other copies by mail. They became precious and for some he paid as much as a dollar apiece. He ceased not until careful check gave him assurance, as nearly positive as possible, that every copy had been restored and destroyed.

Meanwhile, though type had been remelted, he set up a corrected edition in its entirety. Extraordinary care was taken. Proof was carefully read at every stage of production. In particular the editor in person certified with each reading that the omitted *r* which caused all the trouble was in its place.

At length the presses were allowed to turn and they turned to some purpose. Once again the special was distributed far and wide. And with a sigh of satisfaction, with the sense of high duty nobly performed, the editor opened his own copy for a loving look. Especially did he look for that unfortunate *r*. Had anything, at the last moment happened? No, thank God! It was in place!

The line now read, "*bottle-scarred*".

#### THE ABSENT MINDED PROFESSOR

This is a true story. Moreover it has a moral. If you smile, don't do it with self-assurance. Any one of us may be next.

An eminent scientist wrote us that he was constantly discovering, by mere chance, that we had published certain books; he mentioned specifically a book—call it *A*—which he said should have been announced from the housetops. Yet he had to find out who published it by writing to a colleague. He ordered 2 copies of *A* as well as 2 copies of *B*, another book he was much interested in and had discovered only casually. *B* was not our publication. It was, of course, a polite letter but the inference that we didn't let folks know about our books was pretty plain.

Records indicated that the correspondent received The Kalends, and The Kalends had rather conspicuously referred to *A* at least 3 times. Records also indicated that announcement of *A* had been sent to a list on which the correspondent's name appeared.

But that is far from the point. The point is that 3 weeks prior to the writing of his letter, the correspondent had purchased by letter personally signed, 2 copies of *A*, and a week after that had paid for the 2 copies by personal check.



# Lighthouse Observations

## THE PATIENT WITH HEART DISEASE; CONSIDERED AS A SURGICAL RISK

Physicians are often asked whether a particular person can safely undergo an operation, generally with reference to physical ability to withstand the shock of an anesthetic and the manipulation of a major surgical procedure. Butler, Feeney and Levine (Jour. A. M. A., 95:85, July 12, 1930) have presented us with a review of the case histories of 414 patients who were under observation at the Peter Bent Brigham Hospital, in Boston, or were seen in private practice. None but definite cases of organic heart disease were included in the study; 120 cases of valvular heart disease; 138 of so-called chronic myocarditis; 86 of permanent auricular fibrillation; 35 of angina pectoris; 6 of coronary thrombosis; and a few scattered cases of less common cardiac affections.

The analysis considers the type of operation performed; character of heart lesion and age period of the individuals in each of these groups; the relation of nephritis to the mortality recorded; and the relation of blood pressure to the seriousness of the varying conditions. The study is summarized as follows:

(1) The 414 patients suffering from heart disease, who underwent 494 operations, were studied in order to determine the risk of operation and the rôle played by the heart in the outcome. Deaths were divided into *unexpected* and *inevitable*. There were 28 unexpected deaths; a mortality of 6.3%.

(2) Patients with valvular heart disease; 147 operations were performed on 120 patients; with 3 unexpected deaths—a mortality of 2.1%.

(3) Among 138 patients having chronic myocarditis, there were 8 unexpected deaths in 167 operations—a mortality of 4.9%; these patients were mostly older persons and tolerated operation well.

(4) There were 108 operations performed on 87 patients with auricular fibrillation, with 3 unexpected deaths—a mortality of 3%. Contrary to the general opinion, the risk of operating on such patients is not great.

(5) There were 41 operations performed on 35 patients having angina pectoris, with 3 unexpected deaths—a mortality of 7.7%. There seems to be a slight risk of coronary thrombosis following in the wake of surgical intervention upon patients with angina pectoris.

(6) There were 20 operations performed on the same number of patients with coronary thrombosis; 8 unexpected deaths—a mortality rate of 44.5%.

(7) Of patients with syphilitic aortitis, 11 were submitted to 13 operations; with 1 unexpected death.

(8) There were 6 patients with paroxysmal tachycardia, 3 of whom had attacks during operation and 3 after operation; all recovered.

(9) There were 50 operations performed on as many patients with congestive heart failure; 7 unexpected deaths—mortality rate 17.1%.

(10) There were 433 operations upon 359 patients having heart disease without nephritis; 20 unexpected deaths—a mortality of 4.9%. Among 61 operations performed on 55 patients having heart disease with nephritis, there were recorded 8 unexpected deaths—a mortality of 14.8%; which well

illustrates the increase in risk resulting from the presence of nephritis.

(11) Survival of the patient with heart disease is not the only consideration. Conditions for which there are nonoperative palliative methods of treatment should not be subjected to surgery when the heart disease is so great that the ultimate life expectancy, at best, is short.

(12) In most types of heart disease, the surgical risk is not appreciably greater than in the normal person. In some where the risk would be great, it may be materially diminished by proper pre-operative diagnosis and therapy.

## VOCAL CORDS OF METAL

Metal vocal cords are restoring the power of speech to persons who have become mute. An artificial larynx which, when attached to the throat, functions in all respects like that of nature, is one of the latest products of scientific research, according to a report issued by the Engineering Foundation.

The new artificial larynx, prepared by Dr. R. R. Riesz of the Bell Telephone Laboratories, New York, is a thin metal reed, clamped at one end and free at the other, and can be attached to the windpipe by a rubber tube and coupling pad.

When air is expelled from the lungs and directed through this larynx, it sets the metal reed to vibrating, and the speaker, by the ordinary motions of tongue, lips, and throat muscles, transforms the vibrations into speech.

So complete is the mechanism that by a simple adjustment one can change the pitch of the vibrations, producing the tones of either a man or a woman. The instrument is thus adapted to use by both sexes. Dr. Riesz (Literary Digest, Nov. 22, 1930.) explains:

"Speech sounds in general may be divided into 2 groups. In the first group are placed all the 'voiced' sounds, in the production of which the vocal cords play an important part. Vowels, semi-vowels, diphthongs, transitionals, and voiced consonants are members of this group. The second group comprises the 'unvoiced' sounds, in the production of which no sound is generated by the vocal cords. The unvoiced sounds in general are produced in the mouth. For the voiced sounds, the source is the larynx; where there is a pair of exceedingly adjustable lips—the vocal cords—which during ordinary breathing are drawn out of the way, allowing air to pass freely to and from the lungs. When a person desires to produce a sound, the vocal cords are drawn close together, leaving but a narrow slit between them. As the lungs force a current of air through this slit, the cords vibrate, changing the current of air into a pulsating sound-wave which is modified by the cavities of the throat, mouth, and nose, and emerges as recognizable speech.

Instead of a pair of vocal cords, the vibrating element in the artificial larynx is a thin metal reed, clamped at one end and free at the other. One of the metal tubes leading from the artificial larynx is connected by means of a rubber tube and coupling pad to the termination of the windpipe on the front of the neck. The user blows air from his lungs through the larynx, setting the metal reed in vibration. This vibration generates a train of sound-waves similar to that generated by the vocal cords of a normal person.

The fundamental frequency of sound must be about 125 vibrations per second for a man's voice and 250 vibrations per second for a woman's voice.

An adjustment is provided for changing the pitch of the larynx so that it can be used by either men or women.

The sounds of the *unvoiced* group are produced by blowing air through the larynx in such manner that the metal reed is not thrown into vibration.

A breathing hole in the side of the instrument enables the user to inhale air into his lungs. This hole he covers by pressure with his thumb when he wishes to speak.

By practice, persons can become very proficient at speaking with an artificial larynx, and so be restored to the useful normal activities which attend the power of speech."

## Current Events

### THE PHYSICIANS' ECONOMIC CONTRIBUTION TO THE COMMUNITY

(An abstract of the Presidential Address of Charles Gordon Heyd, M.D., to the Medical Society of the County of New York)

The Medical Society of the County of New York is dedicated to the proposition that:

(1) The fundamental object of medical practice is to provide and make available adequate, effective and efficient medical service at all times for every member of the community, regardless of race, color or creed.

(2) Medical service as provided today is in a large measure effective and efficient although not always adequate or available.

(3) The payment to physicians for medical service is not a large item in the so-called cost of medical care, as only about 50% of patients hospitalized in general hospitals pay a doctor's fee.

(4) There is no logical reason for believing that the professional item for adequate and effective medical service in the cost of medical care can be materially lessened or reduced; on the contrary, there are many reasons for believing that it will be increased, as it must eventually have added to it a charge for professional services.

(5) The doctor is a citizen and must discharge all of his obligations of citizenship the same as any other member of the community.

(6) The doctor is entitled to a monetary return for his labor that is fair and commensurate with his service, training and experience; the fact that the practice of medicine is a profession does not mean that the doctor shall continue to work under a system that is ethically wrong and economically unsound; he must be paid for his services in order to function as a useful and contributing member of society.

These postulates present the background for my remarks and serve as an introduction as to what is the economic contribution of physicians to the community.

It is claimed by competent statisticians that physicians treat  $\frac{1}{3}$  of the population of the United States free of charge. Since at all times there are 2% of the population incapacitated and about 4% physically impaired, it follows that from 375,000 to 500,000 persons are daily treated without charge. If only \$2 per person were charged for treatment, the sum total monetary equivalent for contributions annually made by physicians in the form of free medical treatment would be \$365,-

600,000. If all the medical and quasi-medical foundations were consolidated into one organization their entire contribution to society in dollars during the last 20 years would not equal the annual donation of the physicians of the country. The medical profession may, therefore, justly claim that under the present medicosocial system it stands without a rival in the entire field of medical charity and health philanthropy.

In this connection it is interesting to note that only 4,000,000 Americans submit any income tax reports at all and, in 1927, 1,600,000 of these paid no taxes because exemptions exceeded net income. As returns are expected when income reaches \$2500 for a married person, or \$1500 for a single person, these figures throw a powerful searchlight upon the phenomenon of our ability to pay for things. Assuming 27,000,000 heads of families, less than 10% of them had income sufficient to warrant the preparation of a tax return with the expectation of making payment. It follows that with only 43% of the community gainfully employed and 87% of the community receiving less than \$2000 a year, no matter how much the cost of medical service can be reduced, it cannot be reduced sufficiently low to allow this large group of persons to pay for medical services out of income.

One of the fundamental difficulties in consideration of the high cost of illness is that the public has not been educated to realize that a certain sum of money must be expended to keep the human machine in a state of efficiency.

There are approximately 450,000 persons passing through the wards of the New York hospitals in a year; practically 1,500,000 other citizens avail themselves of the dispensaries. It is evident that this entire group of people, nearly 2,000,000, makes no provision for paying a physician or for periodic visits to the doctor. A very important aspect of the problem is that when sickness appears the cost and expenditure under the present system of payment is an immediate one, forced and made under stress. Out of every 100 who borrow from small loan companies, an average of 28 persons do so because of expenditures arising from illness or death. Interest rates on these loans vary from 12 to 42% per annum, which materially increases the burden of the average wage earner with a family.

There is hardly a member of the community who is gainfully employed that would not be able to handle a reasonable professional charge, in keeping with his economic position, if the load or charge were spread over a sufficient period of time. It seems inevitable that we must come to some scheme whereby the cost of professional attention, or even the hospital, might be spread over a sufficient number of months to enable the patient to liquidate his indebtedness and be a self-respecting, responsible member of the community. It is not for the best interests of society that such a large body of the population should be remiss in its rightful obligation and obtain medical services free of charge. It is not good public policy to disburse money given or donated, or extracted from the public by taxation, for such widespread hospital and medical services.

It would be a splendid move in social medical adjustment (1) to curtail the unrestricted system of gratuitous relief, by excluding those not entitled to gratuitous medical advice; (2) to insist on payment of the medical staff, even those engaged in out-patient work, and the payment of fees by patients in the pay ward and in the consultation departments of voluntary hospitals.



If the doctor could be assured of, let us say, a minimal revenue from all the patients that he takes care of he could well afford to permit a reduction on some percentage of his work. But what is attempted, if one may judge from recent newspaper publications, is to oblige the doctor to continue his free medical service and at the same time accept a reduction in his charges to the patients that he takes care of and who are occupying certain types of rooms which are essentially private hospital accommodations.

It would appear that the time is not far distant when the County Medical Society must decide whether as an organization it shall enter into what may be termed the *business* of medicine. It is apparent that with our nearly 4000 members we have a sufficient clientele to seriously consider the establishment of an insurance bureau, or even an insurance company. It might also suggest itself that there could be formed and managed under the auspices of the County Medical Society a credit and funding society, a collecting bureau, and we might even go so far as to organize the personnel for the management of clinics.

It might be considered the proper function of the Bureau on Publicity of the Medical Society of the County of New York to devise and draw up a list of zones within the city so that persons inquiring for competent medical service could be given a list of properly qualified physicians, members of the County Medical Society residing or practicing within the zone, and to make available to the inquiring public the names of certified specialists residing or practicing in certain designated zones.

## PRESENT STATUS

### STATE SOCIETY-RUTGERS' POST-GRADUATE COURSE

The committee is offering this year 6 distinct courses from which the county societies may select according to local choice. In each county local committees are working with the State Society Committee and representatives of Rutgers, endeavoring to meet the desires of each group and to enlist as many students as possible. To us the plans seem very attractive, and we hope our readers will carefully inspect the following synopses of lectures and list of exceptionally talented teachers engaged, and then communicate with their own county society committee about subscribing.

#### SYNOPSIS OF LECTURES ON CARDIAC, VASCULAR AND RENAL DISEASES

Lecture I. Diagnosis from the etiologic, anatomic and physiologic viewpoints. Elementary electrocardiography. Discussions of cardiac arrhythmias.—Dr. Arthur De Graff.

Lecture II. Rheumatic heart disease—Bacterial endocarditis.—Dr. Irving Graef.

Lecture III. Thyroid heart disease—Essential hypertension.—Dr. William Goldring.

Lecture IV. Syphilitic heart disease—Degenerative (arteriosclerotic) type of heart disease.—Dr. De La Chapelle.

Lecture V. Heart failure. Types; Clinical Pictures; Course; Treatment.—Dr. John C. Wyckoff.

Lecture VI. Classification of Bright's disease—Urine Sediment count—Kidney in pregnancy (Eclampsia).—Dr. William Goldring.

Lecture VII. Function of normal kidney—Renal insufficiency—Uremia; Kidney function tests.—Dr. Norman Jolliffe.

Lecture VIII. Prognosis; clinical course; treatment of hypertension and various types of Bright's disease. Treatment of uremia.—Dr. William Goldring.

#### OUTLINE OF NEWER THERAPY COURSE

Lecture I. Introductory Lecture: (a) Pharmacology of drugs; (b) scientific methods of study of therapeutic agents; (c) principles of dosage; (d) the place of mixtures in modern drug therapy; (e) rational versus empiric drug therapy; (f) the proprietary drug problem; (g) the Council on Pharmacy and Chemistry; (h) "Useful Drugs" and "New and Nonofficial Remedies".

Lecture II. Diuretics: (a) Newer conceptions of the diuretic action; (b) organic mercurials—novasurol and salyrgan; (c) urea; (d) acid-forming diuretics—ammonium chloride; (e) theocin.

Lecture III. Circulatory Drugs: (a) Purines—coronary vasodilators; (b) camphor and its derivations—cardiazol; (c) barium chloride; (d) quinidin; (e) drugs for the reduction of blood pressure—sodium sulphocyanate, cucurbitacin, bismuth subcarbonate.

Lecture IV. Digitalis.

Lecture V. Digitalis, continued.

Lecture VI. Hypnotics—analgesics—anesthetics: (a) The barbituric acid group; (b) fixed anesthetics; (c) mixed analgesics in labor.

Lecture VII. Recent studies in the treatment of anemia: (a) Liver extract; (b) stomach extract; (c) copper.

Lecture VIII. Hormones and glandular products: (a) Pituitary; (b) insulin; (c) miscellaneous.

#### OUTLINE OF OBSTETRICS COURSE

Lecture I. Antenatal care: General care; importance of cardiovascular-renal systems; pelvimetry; types of pelvic deformity; border-line contractions; forming an estimate of labor.

Lecture II. Abortion; miscarriage; placenta previa; abruptio placentae; other sources of antepartum and intrapartum hemorrhage.

Lecture III. Obstetric forceps: Indications; contraindications; varieties and special indications for each; manikin demonstration and practice.

Lecture IV. Version; breech extraction; manikin demonstration and practice.

Lecture V. Management of third stage; management of puerperium; complications of pregnancy; of the puerperium; labor anesthesia.

Lecture VI. Puerperal sepsis.

Lecture VII. Toxemias of pregnancy.

Lecture VIII. Postpartum gynecology of obstetrics: Postpartum follow-up; endocervicitis; cervical erosions; uterine displacements; prophylactic and nonoperative treatment.

#### OUTLINE OF PEDIATRICS COURSE

Lecture I. Feeding problems in infancy. A simple practical method, with illustrative cases.—Dr. Charles Hendee Smith or Dr. Gaylord W. Graves.

Lecture II. Periodic health examinations and preventive pediatrics. Methods, records and instructions to parents. Defects found. Cases demonstrated.—Dr. Gaylord W. Graves or Dr. Josephine H. Kenyon.

Lecture III. Malnutrition in childhood: Among school and pre-school children. Diagnosis and treatment. Clinical demonstrations. Lantern.—Dr. Hugh Chaplin or Dr. Edward S. Rimer.

Lecture IV. Tuberculosis in Childhood. Acute (in infancy) and "infectious" (latent) in older children. Lantern cases.—Dr. Charles Hendee Smith or Dr. Edith M. Lincoln.

Lecture V. Heart disease in childhood and oral

infections. Prevalence, importance, diagnosis, treatment, clinical cases.—Dr. Lucy Porter Sutton or Dr. Alfred Langmann.

Lecture VI. Differential diagnosis of pulmonary diseases. Pneumonias, empyema, abscess, bronchiectasis, nilus nodes. With cases.—Dr. Howard H. Mason or Dr. Charles Hendee Smith.

Lecture VII. Endocrine disorders and developmental defects. Goiter, cretinism, dyspituitarism, thymus, mongolism, dwarfs, mental defects.—Dr. Herbert B. Wilcox or Dr. John B. Caffey.

Lecture VIII. Subject and lecturer to be chosen. Four electives of which one may be chosen: (a) Acute disease in childhood; (b) laboratory aids to diagnosis; (c) acute infectious diseases; (d) sensitization in childhood.

#### OUTLINE OF COURSE IN GYNECOLOGY

Lecture I. Etiologic significance of prominent gynecologic symptoms. Disorders of development and function; malformations, amenorrhea, dysmenorrhea, intermenstrual pain. Methods of examination.

Lecture II. Infections of female pelvic organs: (a) Septic genital infections (non-specific); (b) septic urinary infections; (c) specific infections.

Lecture III. Diseases of vulva and urethra. Diseases of vagina.

Lecture IV. Diseases of uterus: Endometritis; lacerations and displacements.

Lecture V. Diseases of uterus continued; tumors.

Lecture VI. Diseases of fallopian tubes: Inflam-

#### SCHEDULE OF CLASSES AS ARRANGED TO DATE—FEBRUARY 20

Course	Given at	First Lecture Starts	Meeting Place	Time of Meeting Day	Hour
Drug Therapy	Atlantic City	April 1	Atlantic City Hospital	Wed.	8:30 p. m.
Drug Therapy	Trenton	April 2	Mercer Hospital	Thurs.	8:00 p. m.
Gynecology	Trenton	April 7	St. Francis Hospital	Tues.	4:00 p. m.
Pediatrics	Trenton	April 3	Mercer Hospital	Fri.	8:00 p. m.
Pediatrics	Newark	Mar. 20	Presbyterian Hospital	Fri.	8:45 p. m.
Cardiac	Newark	Mar. 18	Academy of Medicine	Wed.	8:45 p. m.
Gastro-enterology	Newark	Mar. 20	Academy of Medicine	Fri.	8:45 p. m.
Combination course: 4 lectures on Gastro-enterology 4 lectures on cardiac diseases	Camden	April 1	Camden Dispensary	Wed.	4:00 p. m.
Combination course: 4 lectures on obstetrics 4 lectures on gynecology	Bridgeton	April 2	Bridgeton Hospital	Thurs.	4:00 p. m.
Gastro-enterology	Somerville	Mar. 16	Somerset Hospital	Mon.	8:30 p. m.
*Gynecology—Combination course	Newton	Mar. 26		Thurs.	8:30 p. m.
General course	Mt. Holly New Brunswick		Mt. Holly Hospital		
Combination course 4 lectures on gynecology 4 lectures on obstetrics	Hackensack	May 1	Hackensack Hospital	Fri.	3:30 p. m.
Combination course Gastro-enterology— 4 medical and 4 surgical	Paterson	April 3	Health Center	Fri.	8:30 p. m.
Obstetrics	Jersey City	April 6	Jersey City Medical Center	Mon.	4:00 p. m.
Gastro-enterology	Jersey City	April 4	Jersey City Medical Center	Sat.	4:00 p. m.
Pediatrics	Elizabeth	Mar. 18	Elks Club	Wed.	8:30 p. m.
Gastro-enterology	Elizabeth	Mar. 19	Elks Club	Thurs.	8:30 p. m.

#### REMARKS:

\*There will be a combination course in Newton. Three of the lectures will be on gynecology. The local committee has not decided definitely the subject for the other lectures.



mation, ectopic pregnancy, tumors. Diseases of the ovaries; inflammation and tumors.

Lecture VII. Office gynecology.

Lecture VIII. Indications for surgical treatment; after treatment of gynecologic operations.

#### OUTLINE OF GASTRO-ENTEROLOGY COURSE

Under the direction of Mills Sturtevant, M.D., Clinical Professor of Medicine, New York University.

Lecture I. Gastro-intestinal symptoms as an approach to diagnosis. Gastric neuroses. Gastric functional diseases. Gastropnoia. Gastric symptoms in diseases of other organs.—Dr. Mills Sturtevant.

Lecture II. Gall-bladder disease. Liver function tests and their value to the general practitioner.—Dr. Norman Jolliffe.

Lecture III. Diseases of the esophagus.—Dr. Robert P. Wallace.

Lecture IV. Peptic ulcer: Etiology—pathology—symptomatology—types—diagnosis—roentgenology.—Dr. Louis L. Shapiro.

Lecture V. Peptic ulcer; medical treatment.—Dr. Mills Sturtevant.

Lecture VI. Peptic ulcer; surgical treatment including perforation and the relation of ulcer to carcinoma.—Dr. Arthur Wright.

Lecture VII. Tumors of the stomach and intestines: Diagnosis; pathology; and treatment.—Dr. Irving Graef.

Lecture VIII. Diarrhea; constipation; colitis; diagnosis of rectal disease.—Dr. M. P. Cowett.

#### FACULTY

The lecturers have not been selected for all centers but we can now name some prominent doctors from New York and Philadelphia who will give lectures. In Jersey City, they are using a combination of local men with New York personnel. The following doctors have already accepted invitations to lecture:

Mills Sturtevant, New York  
 Norman Jolliffe, New York  
 Robert P. Wallace, New York  
 Louis L. Shapiro, New York  
 George Stewart, New York  
 Irving Graef, New York  
 M. P. Cowett, New York  
 Wm. Goldring, New York  
 De La Chapelle, New York  
 John C. Wyckoff, New York  
 Arthur Wright, New York  
 Arthur DeGraff, New York  
 Harry Gold, New York  
 Cary Eggleston, New York  
 Alfred C. Beck, Brooklyn  
 W. E. Caldwell, New York  
 John Osborn Polak, Brooklyn  
 John C. Gittings, Philadelphia  
 W. Wayne Babcock, Philadelphia  
 Charles H. Smith, New York  
 Gaylord W. Graves, New York  
 Josephine H. Kenyon, New York  
 Hugh Chaplin, New York  
 Edward S. Rimer, New York  
 Edith M. Lincoln, New York  
 Lucy Porter Sutton, New York  
 Alfred Langmann, New York  
 Howard H. Mason, New York  
 Herbert B. Wilcox, New York  
 John B. Caffey, New York

#### FIFTH COUNCILLOR DISTRICT MEETING

We are informed that an interesting program is in process of development for a joint meeting of all the county medical societies of this district—embracing Atlantic, Cape May, Cumberland, Gloucester and Salem Counties, to be held in Atlantic City on Friday, April 10.

An afternoon session will be devoted to discussion of economic problems introduced by distinguished members of the profession invited because of their knowledge of such matters, and that session will be followed by a dinner at the Hotel Chalfonte.

An evening session will then convene at the Atlantic City Hospital where an address upon some scientific subject, by Dr. Joseph C. Doane, of Philadelphia, will be associated with clinical demonstrations by members of the hospital staff.

It is expected that this district meeting will be well attended. It should be, with such an attractive program.

## Public Relations

### DISCLOSURE OF DISEASES UNDER PROHIBITION ACT ABOLISHED

(Editorial Jour. A. M. A., Feb. 7, 1931.)

Physicians who prescribe liquor need not state on the stubs of their prescriptions the ailments for which it is prescribed. The item on the stubs of outstanding prescription blanks calling for this information may be ignored. When new prescription blanks are printed, the item calling for such information will be omitted. The Wickersham Commission, in its report released January 20, recommended that physicians prescribing under the National Prohibition Act be no longer required to state on blanks going into the public files the ailments for which prescriptions are given. Two days later, the Commissioner of Industrial Alcohol issued a circular letter instructing all supervisors of permits under the act that ailments need no longer be stated on the stubs of prescriptions and directed them to advise the physicians in their several districts to that effect. Physicians are still required, by the National Prohibition Act itself, to keep in their offices book records of prescriptions for liquor, including records of the ailments for which it is prescribed, subject to inspection by prohibition officers.

### WARNING TO PHYSICIANS

(Editorial New England Jour. Med., Dec. 25, 1930.)

Most of the physicians of the state, registered under the Harrison Narcotic Law, have no doubt by this time received their warning notice relative to re-registration and payment of special tax on or before July 1 of each year.

We trust that all have given due consideration to the second paragraph and have correctly interpreted its significance. "Section 9 of the Harrison Narcotic Law provides that anyone who violates or fails to comply with any of the above requirements shall, on conviction, be fined not more than \$2000 or be imprisoned not more than 5 years, or both, in the discretion of the court."

The medical profession, it will be seen, under a law of the land of the free and the home of the brave, constitutes a privileged class. It is privi-

leged to prescribe narcotics on the payment of a special tax which allows it to assume the privilege of bearing the financial burden of narcotic control; its members are given the privilege of languishing in jail, fortunately for a period of not more than 5 years, if by a simple error of omission they should fail to fulfill an imposed obligation on a certain date.

Perhaps the court, in its infinite mercy, might not impose the extreme penalty; perhaps inconvenience, indignity and humiliation might be the only penalty involved in a given instance; nevertheless the specific penalty is provided by law and to no one is it guaranteed that he will not suffer it if he innocently fails to fulfill the requirements.

Here, if ever there was one, is a wrong which needs to be righted. Here is an instance of legislation gone awry. A learned profession, a profession which ministers to the needs of others, a profession which has little interest in or aptitude for practical politics must suffer from discriminatory legislation of the less intelligent sort. How long must this continue?

### THE NEW ENGLAND MEDICAL CENTER

The New England Medical Journal of February 5, 1931, contains a report of the proceedings attendant upon laying the corner-stone of the first of the buildings for this new project. In the same Journal is a letter from Dr. Otis, for many years an eminent teacher and practitioner of medicine in Boston, upon the passing of the country doctor and the development of medical centers. These literary contributions bear so directly upon the question we discussed in our issue of last November—when we suggested utilization of centrally placed county hospitals, under control of the county medical society, as medical centers—that we take pleasure in presenting abstracts of each for your consideration.

"The honor of laying the corner-stone was given to Dr. Merritt H. Eddy, of Middlebury, Vermont, the oldest family doctor in New England. Dr. Eddy came to Boston on his ninety-eighth birthday to take part in these exercises. He is a graduate of the University of Vermont College of Medicine (class of 1865) and for 65 years has been practicing his profession. As it is the purpose of the New England Medical Center to assist in the training of general practitioners for New England, it was eminently fitting that the laying of the corner-stone be done by the oldest living physician in the New England States.

After the laying of the corner-stone Mr. Rotch introduced Dr. Alfred Worcester, Professor of Hygiene at Harvard College, who delivered a short address:

"We old-fashioned country doctors are delighted with the building of this Health Center. For we believe that in it not only will there be larger provision for the sick but also far better facilities for training young doctors to be general practitioners.

Medical science can be learned from lectures and books and in the laboratories. But the art of medical practice, like every other art, can be learned only by imitation, that is, only by apprenticeship under masters of the art. The Boston Dispensary has always afforded such opportunities to medical students. Indeed in its earliest years, before there were any hospitals in this part of the country, this was the only place where group teaching of medical students was possible. Nearly a half century ago I myself learned more here than in any other clinic.

We old general practitioners have for many years been fearing that in the marvelous advance of medical science the art of practice is being lost. But this need not happen. Specialists we must have for no one can now, as formerly, be equally proficient in all branches of medical practice. And although in some of the specialties master of the art of practice is not so indispensable as it is to the general practitioner, yet in every one of the specialties medical students can be taught and ought to be taught how to treat the patient himself while learning how to treat his disease.

However great the need may be for specialists the greater need just now is for general practitioners, who, answering every call by either night or day, will do all they possibly can for the relief of the sick and suffering. Such doctors must know at least enough of the specialties to summon the aid of specialists when such service is needed. They must also know enough for emergency service when there is no time to lose, and when so far away as to make the summons of a specialist practically impossible. For, as ought to be more generally known, in many emergencies the patient has better chances from early, even if somewhat crude, service than later he would have from the service of the most expert.

In this new Health Center, as we confidently believe, it will be possible to give future medical students just the kind of training needed for general practice."

The following message is from the letter of Edward O. Otis, M.D., Emeritus Professor Tufts College Medical School:

"In a recent memorial to a very worthy country doctor in Vermont occurs this significant statement: 'There is no question that "the country doctor" is passing.' If this, as it appears to be, is the case, is there not good reason why this should not happen in the general advance and progress of medical science? I believe that something better is to take the place of the old-time family practitioner, but I do not believe that it will be accomplished by trying to replace what we have known as the 'country doctor'. After a student of medicine has spent 7 to 8 years in preparing himself for practice, at a large expense of time and money, he will rarely be willing to take up an ordinary country practice and establish his home in a small community. Furthermore, having been trained at a first-class medical school, he has learned the necessity of near-by facilities of a well-equipped hospital. He knows that he cannot in many cases make an accurate diagnosis without the aid of laboratory and x-ray facilities, and therefore, besides the other reasons, he is unwilling to go into the country where these facilities are not readily available. In my service as teacher at the Tufts College Medical School for the last 25 years, I have met many of my old pupils in different parts of the country, but I have found few who have settled as country doctors. Therefore, in the march of time and progress, it will not avail much to look 'mournfully upon the past' of the country doctor, but to see how his place can be better filled through better knowledge of medical science and treatment. Many suggestions have been offered; the first requisite is to supply everyone, rich and poor alike, with modern medical service. This, it seems to me, might be done through smaller medical centers throughout New England, at which centers there should be a well-equipped hospital with a lying-in department and with a high-grade personnel. Such a center could easily, it seems to me, serve an area within a radius of 10 or 15 miles through the present system of good roads, the automobile and tele-



phone. Doubtless other plans of affording adequate medical service to everyone can be suggested—but one thing seems evident to the observant modern physician, and that is that the country doctor as he existed previously is fast passing and times and conditions have changed. It is well that it is so—although we take off our hats to him as he passes with bowed shoulders but head erect."

### ANNOUNCEMENT OF THE FIRST AWARD UNDER THE THOMAS W. SALMON MEMORIAL

Dr. Adolf Meyer, Professor of Psychiatry, Johns Hopkins University, has been chosen to receive the first award under the recently established Thomas W. Salmon Memorial. Announcement to this effect was made Saturday, January 10, at a meeting held at the New York Academy of Medicine at which an endowment fund of \$100,000 contributed by friends and associates of the late Dr. Salmon was officially presented to the Academy and active work under the Memorial was begun.

The award was made by a committee appointed by the Academy to survey the field and select the outstanding contributor to scientific advance in mental medicine, and Dr. Meyer was selected in recognition of his distinguished services to psychiatry and mental hygiene over a period of years. The award carries with it an honorarium of \$2500 and the recipient will give The Thomas W. Salmon Lectures during 1931. The dates of the lectures and the places at which they are to be delivered will be announced later.

Dr. Meyer is an outstanding man among the psychiatrists of the world and has been for many years a leader in the development of his specialty. A teacher from his earliest days in the United States, his influence on psychiatry expressed through his pupils is well known abroad. Conservative and sound, but with broad vision, and at all times in contact with his anatomic, neurologic, physiologic and psychobiologic laboratories, he has given a powerful stimulus to the building up of a dynamic and progressive conception of psychiatry.

Not generally known is the fact that Dr. Meyer is the man who suggested and first used the term "mental hygiene" and gave the mental hygiene movement its name. By that very naming of this great movement, with which he has been identified from the very beginning, he gave it the initial impetus and forward-looking, comprehensive program. He was one of the original organizers of the National Committee for Mental Hygiene, the agency largely responsible for development of the mental hygiene movement in this country and the world over.

## School Health Department

### SPECIAL MEETING OF SCHOOL PHYSICIANS

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton, N. J.

The meeting of school physicians inaugurated last June at the Annual Convention of the State Medical Society will be repeated this year. The day

is Wednesday, June 3, in the afternoon. The place is the Berkeley-Carteret Hotel, Asbury Park. Watch this column for further announcements.

### AMERICAN ASSOCIATION OF SCHOOL PHYSICIANS

This infant society, now about 3 years old, is enjoying phenomenal growth. This month it celebrates the appearance of "The School Physician's Bulletin", a neat appearing, promising journal which, hereafter, will be published monthly.

The secretary of the Association is Dr. William A. Howe, of the State Department of Education, Albany, New York.

A New Jersey physician, Dr. Brinkerhoff, chief of the medical inspection department of Jersey City schools, is one of the vice-presidents.

### NOTES OF INTEREST

*Unique Recording and Filing System.* The individual examination record cards of the pupils are filed by classrooms. The guide card has the grade, the teacher's name, and the summary of the physical defects of the class. Thus, at a glance, one can tell the needs of the group. As a defect is corrected, the child's name is crossed off in red ink. The nurse who devised this system reports it as more satisfactory than the method of having defects reported on separate forms. Each time she consults this new file, the existing needs are repeatedly brought to mind.

*Weight and Height.* The American Child Health Association announces abandonment of its height-weight charts. This is the outcome of an extensive research throughout the country with school children. The report is contained in a booklet entitled "Present Practices in the Light of Research". The address of the Association is 370 Seventh Avenue, New York City.

*Crippled Children.* "The Crippled Child" is the name of a monthly journal published by "The International Society for Crippled Children, Inc.", located at Elyria, Ohio. It is said to be the only magazine published in English on the problems of the crippled child.

*Mental Hygiene.* Dr. Uel W. Larkin, President of the National Education Association, said at its last convention: "Never before has there been so much general interest in safeguarding the mental health of school children. It is significant that approximately 20 courses have been introduced into our colleges and universities to train visiting teachers, workers who are equipped with an understanding of psychology, mental hygiene and social adjustment. The visiting teacher will in time replace the attendance officer. Instead of maintaining a police force to keep children in school, we shall draw them there by the intelligent and friendly guidance of teachers who understand the problems of childhood."

*Joint Committee.* The Joint Committee on Health Problems of the American Medical Association and the National Education Association announces the revised edition of its famous report "Health Education". It is certainly worth having, even better than the 1924 edition which sold to the extent of 75,000 copies. Address the National Education Association at 1201 Sixteenth Street, Washington, D. C.

*Reports from the Field.* This office is receiving glowing accounts of your field secretary's (Mrs.

Taneyhill) success in putting over her new talk on mental hygiene. More requests for her services are coming in than we can meet. It is one more indication of the great interest in mental hygiene.

## In Lighter Vein

### Hand Him a Fan

Sam, who had just fulfilled a lifetime ambition and bought a fur coat, went strutting down the street. He met a poor friend, shivering with cold, who said:

"Say, Sam, it's pretty cold today, ain't it?"

"Is it?" said Sam, peering out from the depths of his fur collar. "Now, you know, I really haven't looked at the paper today."—Wall Street Journal.

### No Sale

Sporting goods salesman (who has talked golf for an hour): By the way, I don't know if you are interested in golf. I hope I haven't been boring you.

Girl customer: Not in the least—but tell me, what is golf?—Good Hardware.

### The Planet's Complaint

"What's wrong with the world, anyway?" asked the first pessimist.

"Too much rope is being used for making cigars and not enough to hang gangsters," growled the other one.—Cincinnati Inquirer.

### On a Strafing Cruise

Mother—"Why ever are you sitting there when you ought to be in bed?"

Peter—"There's a mosquito in my room."

Mother—"It hasn't bitten you, has it, darling?"

Peter—"No, but it came close enough for me to hear its propeller."—Humorist (London).

Speaking of teamwork we've noticed that it's usually the case when a family is fighting to keep the wolf from the door that the stork takes the opportunity to slip down the chimney.—Ohio State Journal.

One doesn't hear anything about the dangers of kissing any more, so we suppose the educational campaign must have broken up that deadly habit.—Ohio State Journal.

"My advice to those who want to live to a good old age," says a doctor, "is—walk slowly." Those who follow this advice should take the precaution of keeping to the sidewalk.—The Humorist.

### Master-Mind

The bridegroom was in a poetic frenzy as he strolled along the seashore. "Roll on, thou deep and dark blue ocean, roll", he recited to his bride.

"Oh, Gerald", she exclaimed, "how wonderful you are. It's doing it."—Exchange.

### Funny Finny Stuff

Did you ever stop to think that a fish may go home and lie about the size of the bait he hooked?—Judge.

### May I Cut In?

Friend: Isn't your youngest son a surgeon?

Actor (proudly): Yes; he opens in Bellevue Hospital tonight!

## Woman's Auxiliary

### WOMAN'S PART IN MEDICAL HISTORY

Some months ago we read, in the New England Medical Journal probably, a suggestion that in paying tribute to those physicians who pioneered in the use of chloroform and ether as anesthetics it might not be amiss to consider the heroism of the first patients who submitted to such anesthesia. Now there comes to our attention the report of a ceremonial in Kentucky, where, at the unveiling of a statute to Dr. Ephraim McDowell, an appropriate tribute was paid to his patient on the historic occasion when he performed the first ovariectomy.

The Woman's Auxiliary to the Kentucky Medical Association played an important rôle on that occasion, and it occurs to us that many similar events might be arranged in our several states by the local auxiliaries—events that would serve at least as acknowledgement of debts long unpaid to men and women patients who served humanity quite as effectively as and perhaps more heroically than the surgeons who devised and performed new operations.

We reproduce from the Kentucky Medical Journal of January 1931 an account of the incident to which we have referred.

### Jane Todd Crawford—The Model Patient\*

By Mrs. P. E. Blackerby, Past-President  
Woman's Auxiliary to the Kentucky State Medical Association, Louisville, Ky.

It is peculiarly gratifying to the Woman's Auxiliaries to the Kentucky State and the Southern Medical Associations that we should have been invited to be represented on this historic occasion when the medical profession is paying its tribute to the memory of Ephraim McDowell, of whom Dr. David W. Yandell, when contrasting the fame of the statesmen, the orators and the military men of Kentucky with that of McDowell, said: "Chief among all of these is he who bears the mark of our guild, Ephraim McDowell; for the labors of the statesmen will give way to the pitiless logic of events, the voice of the orator grows fainter in the coming ages, and the deeds of the soldier eventually find place only in the library of the students of military campaigns, while the achievements of the village surgeon, like the widening waves of the inviolate sea, shall reach the uttermost shores of time hailed by all civilization as having lessened the suffering and lengthened the span of human life."

In the history of no other state or nation has its medical profession contributed more glorious pages as the record of its service to humanity than have the physicians of Kentucky. Towering among these stands this pioneer surgeon, whose lineaments stand revealed before us by the art of the sculptor, to live forever as a memorial to one of the greatest servants of mankind. It is fitting that this monument should be presented to the Commonwealth so glorified by its organized medical profession. It is fitting that it should proudly stand in the Rotunda of our beautiful Capitol, that all who behold it in these Halls of State may be stimulated by his illustrious example. Physicians, yes, statesmen and citizens, too, may better serve their kind by familiarizing themselves with the

\* (Delivered at the Unveiling of the Niehaus Statue of McDowell in the Capitol, Frankfort, Ky., November 15, 1930.)



story of this man and by dwelling upon the matured product of his labor, as the great orator of his occasion has so well done.

It is fitting, too, that a woman should have been selected to pay the tribute of womankind to the man whose courage and scientific study opened what seems to us as the magic doors which restore health and peace and comfort and usefulness. We are appalled as we contemplate the untold sufferings of our sex through the ages before McDowell inaugurated the era of modern surgery. One shudders as one thinks of the hopeless horror of the miserable sufferer condemned helplessly to her deathbed.

Picture for yourself the scene on those winter days of 1809, when Jane Todd Crawford lay suffering in her farm home, in Green County. Already her mother of 5 children she had experienced the extremity of pain and the happiest reward within the hope of her sex—motherhood. Now, however, stretched upon her bed of pain, the kindly ministrations of her family were only able to make her conscious of their love and sympathy. She was blessed, as all are blessed who have that happy experience, with the service of her family physician. Women know best what this means. Too frequently they, themselves, are the sufferers from illness. When they are not, the strain upon them is the greater, for the child they have borne or the husband and helpmate is in danger. Then, besides her faith in the Great Physician, her human helper is her family physician. It is he who alleviates the pain, assuages the fever, exorcises the infection, inculcates confidence, restores hope. Mrs. Crawford was fortunate in having such intimate guidance, and yet there arrived the time when the family physician became hopeless, too. And, as family physicians, realizing their responsibility for a human life, have always done, and will always do, her family physician sought the aid of the foremost specialist of his time, the first surgeon of the scattered community that had so recently been transformed from an Indian hunting ground to a proud, though still feeble, Commonwealth.

Responding to this urgent call Dr. McDowell rode over the but recently marked trail through the woods from Danville to her home. He found her trouble really to be an ovarian tumor, immediately threatening a fatal end.

To quote the graphic description of Dr. Samuel Gross:

"After a most thorough and critical examination, Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance for relief was excision of the diseased mass (an ovarian tumor). He explained to her, with great clearness and fidelity, the nature and hazard of the operation, he told her that he had never performed it, but that he was ready if she were willing, to undertake it, and risk his reputation upon the issue; adding that it was an experiment, but an experiment well worthy of trial. Mrs. Crawford listened to the surgeon with great patience and coolness, and at the close of the interview, promptly assured him that she was not only willing but ready to submit to his decision; asserting that any mode of death, suicide excepted, was preferable to the ceaseless agony which she was enduring, and that she would hazard anything that held out even the most remote prospect of relief. The result has been long before the profession. Mrs. Crawford submitted to the op-

eration, and thus became the first subject of ovariectomy."

This courageous woman was 47 at the time of the operation, and, as a result of it her life was extended 31 more years and she died in 1841 at the age of 78.

In his description of the operation, Dr. McDowell stated that Mrs. Crawford had been affected with continuous pains for which she could find no relief. After having determined that it was a tumor of the ovary, he states: "Having never seen so large a substance extracted, nor heard of any attempt or success attending any operation such as this required, I gave to the unhappy woman information of her dangerous situation. She appeared willing to undergo an experiment, which I promised to perform if she would come to Danville, the town where I live, a distance of 60 miles from her place of residence. This appeared almost impracticable though she performed the journey in a few days on horseback."

Mrs. A. T. McCormack has graphically drawn a picture of the scene:

"For a moment, let us go back to that primitive operating room improvised in the home of Dr. McDowell, in Danville, which is still standing, and visualize the scene.

The room is rather bare and quite cold, too, for it is a wintry day, this December 13, 1809. In the center of the room, near the window, is a long wooden table covered with a folded blanket. On this lies a woman patient—not in surgical gown and stockings, but apparently, fully dressed, her head resting on a pillow covered with a white slip. Her abdomen, deformed by the massive growth, forms a veritable hill under the light blanket that covers her.

She is a courageous woman, a quiet, practical woman, unafraid of plunging into the unknown, a pioneer all her life, used to the hardships and the hazards of the frontier, yet a woman of fine feeling and tender sensibilities. But, here she is pioneering in a new field. Pioneering for you and for me even though she did not realize it.

Actually, she is about to submit to an experiment on her own body, one that had never before been accomplished. Her abdomen is to be deliberately cut open with a knife by this equally brave and equally heroic man, several years younger than herself, all for the purpose of determining whether or not he can relieve her agony by removing this painful growth from her interior. It is a new experiment, and, although the outcome is questionable, she is determined to carry through her share in it.

But—how does this woman feel under these circumstances? What does she say and do during that 25 minutes' ordeal?

From her grandson, James Crawford Brown, it was learned that during the operation she occupied herself repeating the Psalms. The strength, the beauty, the sustaining power of the Psalms to a brave woman, who was also an idealist, could scarcely be better demonstrated, for Jane Crawford had no other comfort, not even a relative standing near, no anesthetic whatsoever, either local or general, not even a hypodermic of morphin, for neither anesthetics nor morphia had been discovered. She had only a supreme faith in her Heavenly Father, a hopeful dependence in her surgeon and the indomitable courage of a wonder woman to carry her through this crucial ordeal that has blazed the trail of abdominal surgery,

bringing its inestimable relief to countless thousands of women since. And—let us remember that although today the blessed relief of anesthesia brings total oblivion for the patient, Jane Crawford went through the experiment perfectly conscious of every movement, every word and every glance of the surgeon and his assistants. To restrain her involuntary muscles, men held down her arms and legs with force in order to permit the surgeon to work."

Dr. McDowell concluded his description of the operation and its results as follows: "In 5 days I visited her, and, much to my astonishment, found her engaged in making her bed. I gave her particular caution for the future and she returned home, as she came, in good health, which she continues to enjoy."

Upon the occasion of the dedication of the monument to McDowell at Danville in 1879, Dr. Lewis Sayre, of New York, then President of the American Medical Association, said:

"Another fact strikes me very forcibly, Mr. President, and that is the heroic character of the woman who permitted this experimental operation to be performed upon her. The women of Kentucky in that period of her early history were heroic and courageous, accustomed to brave the dangers of the tomahawk and scalping knife, and had more self-reliance and true heroism than is generally found in the more refined society of city life; and hence the courage of Mrs. Crawford, who, conscious that death was inevitable from the disease with which she suffered, so soon as the village doctor explained to her his plan of affording her relief, and convinced her judgment that it was feasible, immediately replied, 'Doctor, I am ready for the operation; please proceed at once and perform it.' All honor to Mrs. Crawford! Let her name and that of Ephraim McDowell pass down in history together as the founders of ovariectomy."

Dr. Samuel D. Gross, one of the famous surgeons of the world, said:

"All honor to the man who had the courage and skill to do that which no man had ever dared to do before! All honor, too, to the heroic woman who, with death literally staring her in the face, was the first to submit calmly and resignedly to what certainly was at the time a surgical experiment. To her, too, let a monument be erected, not by the Kentucky State Medical Society nor by the citizens of Kentucky, but by suffering women, who, with her example before them, have been the recipients of the inestimable boon of ovariectomy, with a new lease on their lives and with immunity from subsequent discomfort and distress. I know of no greater example in all history of heroism than that displayed by this noble woman in submitting to an untried operation."

To these tributes from these great authorities I am honored today to add my humbler note, my meed of praise to this heroic, pioneer woman and to urge those who contemplate this noble monument to consider, along with the fame of the surgeon, the essential part played by this model patient.

It is in the program of the Woman's Auxiliary to the Kentucky State Medical Association to some day fittingly honor the memory of Jane Crawford with a service similar to this which brings us here today. Thoughtful physicians and grateful womanhood will encourage our efforts in this direction.

## Atlantic County

Reported by Mrs. W. Blair Stewart

Friday, February 13, was not in any way a hoo-doo day, for the Atlantic County Medical Auxiliary gave a very successful and delightful musical-tea in the Solarium on the twentieth floor of Hotel Claridge, a skyscraper for the seashore! This was given to honor the President of the Woman's Auxiliary to the Medical Society of New Jersey, Mrs. John Nevin, of Jersey City. Mrs. James Hunter, Jr., of Westville, Gloucester County, a Past-President, was also a guest.

At 1.30 p. m. the regular business of the auxiliary was transacted, after which the hotel orchestra gave a choice program of music with Mr. William Steking as leader. An hour's program of vocal and instrumental numbers was given by Atlantic City talent.

Addresses were given by both the State Auxiliary President and by the Past-President, upon the work of the auxiliaries, the fine work accomplished, and what may be accomplished.

The Claridge Hotel should be called the house of hospitality, for the management did everything possible to make our musical-tea a success.

## Essex County

Reported by Mrs. F. J. McCauley

The regular meeting of the Essex County Auxiliary was held on January 26 at the Nurses' Home of the Newark City Hospital. Mrs. John Nevin, our State President, addressed the meeting with her usual good cheer and a message advising us to read the Journal.

Following this, Dr. Henry Barkhorn, of Newark, President of the Essex County Medical Society, gave us a very enlightening talk on medical welfare work and current medical legislative measures.

Later, we had a well attended tea.

The report of our Scholarship Fund Chairman, that we had swelled our treasury fund by the last card party to the extent of \$150, was very reassuring. Plans have been completed for a theater benefit performance to be given on Monday and Tuesday, March 9 and 10, at the Lyceum Theater in East Orange. The play is the popular comedy "Pigs".

The parent teaching classes held monthly at the Y. W. C. A. are well patronized; the average attendance is about 125.

Twenty thousand pamphlets explaining the maternity work being carried on through the Y. W. C. A. have been sent to the physicians in Essex County Society for distribution among their patients.

Copies of Dr. E. J. Ill's speech at the convention in Atlantic City last June, on the Widows and Orphans Society, are being sent to every member in the State Society and all the men who are not members will be asked to join.

## Gloucester County

Reported by Mrs. Henry B. Diverty

A meeting of the above auxiliary was held at the home of Mrs. Elwood I. Downs, January 28, at 8 p. m. All of the officers and many members were present.

The business meeting was unusually interesting.



as not only our county business was discussed but our part in the coming American Medical Association Convention to be held in Philadelphia, June 8-12, 1931.

A social hour followed.

### February Meeting

The Woman's Auxiliary of the Gloucester County Medical Society held a meeting at the same time and place as the physicians, 9 p. m., Hotel Pitman, Pitman, N. J. All officers and a goodly number of other members present. All committees reported progress. Ways and Means were discussed and arrangements made for Gloucester Auxiliary's part in the A. M. A. convention to be held in Philadelphia, June 8 to 12. After adjournment we joined the physicians in the dining room where a fine collation was served, adding much to the social hour.

### Hudson County

Reported by Miss Anne Hetherington

The regular meeting of the Woman's Auxiliary to the Hudson County Medical Society was omitted in January in order that the members might devote themselves solely to the mid-winter card party held on February 4, in the Jersey City Y. W. C. A. A steadily increasing interest in this annual event was shown by a larger attendance than ever; the spacious auditorium being filled with players and their friends who came in later for tea. Mrs. George Culver was chairman of the day.

The President, Mrs. John Nevin, had as her guests Mrs. H. Roy Van Ness, of Newark, President-Elect of the State Medical Society Auxiliary; Mrs. Theodore Teimer, of Newark; Mrs. Joseph Morrow, of Ridgewood; and Mrs. Winfield Kilts, of Teaneck, President of the Bergen County Auxiliary.

Mrs. Nevin made a strong plea for a large attendance at the State Medical Society Convention to be held in June at Asbury Park, outlining the fine program planned for entertainment of the Woman's Auxiliaries.

### Merccr County

Reported by Mrs. George N. J. Sommer

While the county medical society members attended the meeting at the Carteret Club in Trenton, their wives were left at "Fannie Gerson's Shop", West State Street, for the auxiliary meeting, after which bridge and a buffet supper were enjoyed.

Mrs. George N. J. Sommer, as Director, and Mrs. D. Leo Haggerty, President of the Branch, were in charge of arrangements.

Reports were given by the chairmen of speakers' bureau; of the hospitality committee; of the membership committee, and by the Treasurer.

"Medical Legislation" was the topic of the address given by Dr. D. Leo Haggerty, member of the Welfare Committee of the State Medical Society.

### Ocean County

Reported by Mrs. E. G. Herbener

A meeting of the Woman's Auxiliary to the Ocean County Medical Society was held at the residence of Mrs. Frank Denniston, 420 River Ave-

nue, Point Pleasant, Friday, February 6, at 3 p. m., with the following members present: Madames V. M. Disbrow, Frank Denniston, F. N. Bunnell, F. N. Bunnell, Jr., Alfred Woodhouse, B. Sawyer, H. B. Disbrow and E. G. Herbener.

Mrs. Nevin, President of the State Society Auxiliary, was also present and gave a very interesting talk about visits to the different county meetings and how they were conducted; and she also made several valuable suggestions on how to increase our membership.

It was agreed that a card party be given, at the American Legion Home at Toms River, April 3, at 2 p. m. At the same time a business meeting of the members can be arranged for.

A vote of thanks was given to Mrs. Denniston for the delightful afternoon and the nice refreshments served.

### Union County

Reported by Mrs. H. V. Hubbard

The first of a series of afternoon meetings was held by the Woman's Auxiliary to the Union County Medical Society in the Winfield-Scott Hotel, Elizabeth, and 40 guests and members sat down to the luncheon; physicians' wives from all over the county were present and Plainfield had a very large representation.

The President and President-Elect of the Auxiliary to the New Jersey State Medical Society, Mrs. John Nevin, of Jersey City, and Mrs. H. Roy Van Ness, of Newark, were the guest speakers. Mrs. Nevin brought a very encouraging report of her visits to other county auxiliaries and told of their activities and work accomplished, as well as of their difficulties. Mrs. Van Ness gave an inspiring talk on the 2 projects the Essex County Auxiliary has started. The first is a series of lectures on prenatal care and parenthood for women who are neither very rich or poor and who lack the opportunity to get such authentic information; the other is a scholarship fund for worthy sons or daughters of physicians.

Mrs. F. A. Kinch, of Westfield, a Past-President from Union County, outlined the spring program for the Auxiliary. Mrs. George L. Orton, another Past-President, reported plans for the entertainment of Auxiliary members at the meetings of the New Jersey State Medical Society, in Asbury Park, June 3-4-5, and those of the American Medical Association, in Philadelphia, June 8 to 12.

Mr. Charles Audsley, of Rahway, accompanied by Mrs. Orton, rendered 2 groups of songs during the afternoon.

Mrs. Taneyhill, Field Secretary of the New Jersey State Medical Society, conducting its program of health talks and preventive medicine, reported some of the benefits derived from attendance at the national meetings in Detroit last year and briefly outlined her work this year on Mental Hygiene, which she will present in every county in the state during the year.

Mrs. H. V. Hubbard, of Plainfield, President of Union County Auxiliary, presided. At the close of the meeting the following officers were presented to those present: President-Elect, Mrs. Harold Corbusier, of Plainfield; Vice-Presidents, Mrs. Norman Currie, of Plainfield, and Mrs. George L. Orton, of Rahway; Secretary, Mrs. Charles Hoffman, of Plainfield; and the Treasurer, Mrs. Dennis McElhinney, of Elizabeth.

The next meeting of the Union County Auxiliary will be a luncheon-bridge held at Plainfield, in March.

## County Society Reports

### ATLANTIC COUNTY

John S. Irvin, M.D., Reporter

The regular monthly meeting of the Atlantic County Medical Society was held at the Chalfonte Hotel, February 13, at 8:30 p. m. The meeting was called to order by the President, Dr. Norman J. Quinn. The minutes of the previous meeting were read by Dr. Joseph H. Marcus, secretary, and approved as read. There were 43 members present.

A communication was received from the Gloucester County Medical Society inviting the local society to attend a meeting to be held February 19 at the Hotel Pitman, Gloucester.

There were 2 applications for membership, one from Dr. Herman Kline, graduate of the Hahnemann Hospital of Philadelphia, and one from Dr. Jesse L. Rork, graduate of Jefferson, June, 1924.

Dr. Joseph Poland asked whether a veterinarian could be admitted to the society as an associate member, and was informed that there was nothing in the by-laws contrary to this.

The Treasurer's report of January, 1931, showed a balance of \$665.71. A committee of 2, consisting of Drs. Silvers and Carrington, was appointed to audit the account.

Report of Committees: Dr. W. Blair Stewart spoke about a meeting of the Atlantic City Restaurant Association, in which the matter of the "fly-by-night" eating houses who operate here in the summer was discussed. In many cases these restaurants and cafes are unsanitary. Ordinance No. 44 governs restaurants and their sanitary arrangements. The Restaurant Association is desirous of having the Medical Society impress the Mayor and the Bureau of Health that this Ordinance is to be enforced. This ordinance says that anyone with a communicable disease is barred from working in restaurants and hotels; but it does not go any further into the question of the health of the employees. The question of having employees examined physically before being allowed to work was discussed.

It would be an easy matter to pick out major difficulties, such as advanced cases of tuberculosis and venereal diseases. The society should be willing to cooperate with the restaurants and hotels to check up on the health of employees and to give them at least a reasonable bill of health, and they should be willing to pay the doctors a reasonable amount for the examinations. The following motion was adopted: "The County Society endorses Ordinance No. 44 and requests that the authorities make every effort to enforce it during the coming year."

Concerning the Daley Collection Agency, Dr. Scanlan reported that Mr. M. R. Daley proposed the establishment of a collection agency within the society with himself as business manager, but as this proposition was no different from any other collection agency, it is recommended that the matter be dropped. A motion to this effect was passed.

Committee on Post-Graduate Study: Lectures will be given by Rutgers University if there are twenty members interested, and the cost for the course will be \$30.00. The lectures are to last an hour and a half, as last year the 2-hour lecture was considered too long. There will be one man in charge, and the topic will be "Newer Drug

Therapy". Literature in these courses will be sent to the members shortly.

Dr. W. B. Stewart congratulated the members upon having so well attended the Philadelphia County Medical Society to hear the talk on the heart; 18 members of the local society were in attendance.

It was moved and seconded and unanimously voted that Dr. Henry O. Reik should be made an honorary member of the society in recognition of his excellent work.

The President introduced the speaker of the evening, Dr. Clay Ray Murray, Associate Professor of Surgery at the College of Physicians and Surgeons, Columbia University, who spoke on the "Treatment of Fractures." (Paper to be published later.)

Following his paper he showed a moving picture of himself treating a Pott's fracture; a talking moving picture, but unfortunately the talking unit could not be used as it was for alternating current while the current available was direct. Dr. Murray covered this defect by talking during the showing of the film.

### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The stated monthly meeting of the General Staff, Atlantic City Hospital, was held in the auditorium on the evening of January 23, under President David B. Allman.

Dr. Allman: The report of a Surgical Service 6 months after its beginning might blur some of the details of each individual case but the perspective of ideas and ideals of the service certainly has not been impaired. For the purpose of record, a brief summary of the statistics is necessary: Admissions on our service were 397; of which 354 recovered, 25 signed releases and 18 died. There was a total of 147 free operations; the largest number of cases ever treated in this hospital on one service. Naturally, the period of August, September, and October always has the largest service because of the increased population of this city during that time.

The service that I have just finished as chief was my tenth, and I can well remember my first. There was formerly ample work for one man, who could very nicely use an assistant and, of course, an intern, but with such help there was no great stress or strain. Today things have changed. Even with 1 competent assistant, 2 residents who devote their time solely to the service, and the help of a capable Chief Resident, the work has increased so in volume that it often occupies more of one's time than it is convenient to give. This is in some measure due to the fact that we have more patients, but more largely to the fact that each patient receives more treatment because there are more things to do and newer methods—and in the traumatic cases because of the multiplicity of injuries. I can visualize the time, not far distant, when the Surgical Service will be relieved of its fracture work and still have ample to do. As a matter of fact, we have already been relieved of most of the rectal work and practically all our genito-urinary work—and I, for one, can truthfully say "good riddance". And, although we surgeons will probably fight tooth and nail against loss of our fracture cases, I do not doubt that 10 years hence some Surgical Chief will report how "rushed to



death" he was in spite of the fact that he treated no fractures.

While on the subject of fractures, I wish to emphasize what has been said by several others, and what I stated in my last annual report—they are constantly becoming more complicated, more unusual and more trying and difficult to treat. Fractures of the skull are not operated upon now with nearly the frequency of 10 years ago.

The Orr method has been a boon in the treatment of osteomyelitis. It is the only condition in which our work has been lessened rather than increased—and where the number of hospital days has been markedly diminished. It is radically different from our old method of daily redressings. The operation consists, briefly, of a gentle cleansing of the wound through a large incision; removal of loose sequestra; painting the interior with iodine and alcohol; packing the wound with vaselin gauze; and applying a cast which is not to be removed for 4 to 6 weeks in most cases. Just how it performs its seeming miracles is not quite clear, whether the meddlesome interference of former days delayed healing of those caes, or whether action of the bacteriophage now hastens healing, but from a fairly large experience I am fully prepared to say that they do heal much quicker, with infinitely less attention, and when the wound is finally healed the patient is strong and robust and not a pale nervous wreck.

Spinal anesthesia was used on my past service in certain selected cases, much to my gratification. It is not an anesthetic of choice for routine use, but it certainly has a definite field, and when properly used at the right time is a most valuable adjunct.

To handle as many thousands of cases as I have seen in the wards without a case of tetanus, and then to have 2 develop in rapid succession during this service, makes one pause and consider. Both patients were brought to our Dispensary immediately following their accidents; both received 1500 units of antitoxin; both were promptly admitted to the ward; both developed tetanus; both were actively treated; and both died. They were not in the same accident—and one was only slightly injured and was discharged as recovered the day following his accident. The lesson to be gathered from these 2 cases is, as reported at our last clinic night, that in every suspected case the prophylactic dose of antitoxin should be 3000 units, and 1500 units should be given every fifth day thereafter until all danger has passed.

I have figured out that each ward patient admitted to this house receives the attention of 25-30 different highly trained individuals, all acting as cogs in the wheels which bring about his recovery—and the fact that these wheels run so smoothly and so efficiently speaks well for the organization of the hospital; and I take this opportunity to thank all who so kindly helped during August, September and October, and whose coöperation is essential for the continuance of the excellent work that has been done and that we are continuing to do.

A review of the 18 deaths which occurred on our service follows: Of fractured skull cases, 4 were in a total of 14 hours; all of these patients were severely shocked, all had complicating fractures in other parts of the body, and none reacted even to the slightest degree. There were 2 cases of fractured pelvis and each died within 3 hr. after admission. One of these patients had a fracture of both arms and both legs, in addition,

and the other was the "parachute jumper" from the Steel Pier—our first case after taking over the service—who had a complete tear through the perineum and through the abdominal wall with evulsion of his intestines, rupture of the bladder and other complicating internal injuries.

One case of ruptured lung died 6 hours after admission.

Four patients died of ruptured gangrenous appendicitis, all from toxemia—3 were rather elderly people and 1 a child 3 yr. old; 3 of the 4 cases were sent in by local physicians not members of our Staff, and the fourth was a woman, 60 yr. old, sent in by a Staff member 3 days after he had made the diagnosis and 3 days after he had insisted upon operation.

One death was due to gunshot wounds of the head and neck; a colored adult who had an altercation with her sweetheart. The bullet wounds in her skull were numerous and at no time was the condition such as to warrant operation.

A patient with very severe, compound, badly comminuted fracture of the femur died 3 days after admission, never having reacted from shock. Another with multiple compound fractures of the left tibia and fibula, with severing of all muscles and tendons, and profuse hemorrhage, died 2 hr. after admission.

One man, aged 63 died of toxemia from a virulent spreading cellulitis of the thigh.

A gall-bladder case terminated 1 day after operation for reasons which we were not able to ascertain, as an autopsy was not obtainable. The woman was in good general physical condition prior to operation; temperature 100°, pulse 96, and respirations 22; mild nephritis; leukocyte count of 21,500, of which 90% were polymorphonuclears. Immediately following operation, her temperature jumped to 104° and pulse to 110; pulse later reached 120, where it remained until death, and temperature varied between 102° and 104° axillary.

A death from nephritis occurred in a young man, 21 yr. of age, 1 month after admission because of an automobile accident in which he received a very bad compound, comminuted fracture of the right humerus with extensive lacerations of the skin and muscles. In spite of blood transfusion, and all other recognized forms of treatment, this boy gradually became more toxic and finally died. While he was moribund it was ascertained that he had been refused life insurance 3 yr. prior to this accident because of a nephritis, and that explained the fact that his nephritis, which we assumed to be toxic in origin and due to the accident, did not respond to treatment.

The eighteenth death was a case of suicide in a colored woman 60 yr. old, which occurred in our ward. She was admitted with a huge, strangulated hernia and intestinal obstruction. An operation was advised and refused and the patient died 48 hr. after admission from toxemia.

As we look back upon the large number of cases—397—which we handled on our service, and when we deduct from the total number of deaths the 8 patients who died within 24 hr. after admission and 1 patient who refused to take our advice, we do not feel that 9 deaths on an active traumatic service is more than should reasonably be expected.

*Dr. Walter B. Stewart.* Report of Pediatric Service: In a review of the second and fourth quarters of the pediatric service of 1930 it is gratify-

ing to observe a rapid increase in the number of admissions to the ward. The majority were of great diagnostic interest. Nutritional and respiratory cases occurred, as usual, in about equal number. More cases of lobar pneumonia than of any other one condition occurred, 12 out of 96, or 4 times as many as of bronchopneumonia. However, contrary to the usual supposition, the mortality from lobar pneumonia in children is low, only 1 death among these 12 cases; but 2 deaths of the 3 cases of bronchopneumonia. Death occurred in 16 of the 96 cases summarized. In 6 of the 16, necropsy was done; an average of 38%, a figure considerably below that of the preceding year. Tuberculosis took the greatest toll; 5 of the 16. Acute gastro-enteritis and pneumonia took 3 each; congenital defects took 2 (1 an infected myelocoele, and 1 cardiac anomaly); starvation, acute encephalitis, and streptococcus meningitis each took 1. It is worth noting that no case of meningococcus meningitis was admitted during this period. There was 1 case of typhoid fever.

Many of these cases have shown such interesting features that the histories should not be filed without recording a few points. Since the chief complaint in 3 of them was almost identical—painful, swollen, immobile legs—let us consider the differential diagnosis. All 3 developed symptoms during their first year. Each was brought to the hospital because of pain on passive motion of the lower extremities, which were swollen, partially flexed, and apparently paralyzed, because of the absence of active motion. The painful joints of rheumatic fever can be eliminated at once because of the age. Poliomyelitis can be excluded because of the acute tenderness present. None of them was rachitic; enabling us to rule out the multiple fractures of rickets. In the first child, aged 3 mo., the cause was congenital syphilis, and the symptoms appeared at 2 mo. There was no active motion in either the upper or the lower extremities, except the fingers. Passive motion was very painful. The underlying lesion is an epiphysitis. Restoration of function was rapid and complete within 3 days of the onset of treatment with mercurial inunctions. This syndrome develops typically from syphilis during the first few months of life.

Symptoms in the second case, a child of 12 mo., were caused by an acute osteomyelitis. The swelling and immobility were unilateral, involving the right lower extremity. The swelling was greatest just below the knee. There was very little superficial redness. However, the high fever and the prostration indicated a deep-seated, acute infection. The osteomyelitis involved the shaft of the right tibia, which was curetted by Dr. Allman, packed with vasclin gauze, and put into a plaster cast. A rapid and beautiful recovery resulted.

Scurvy was the diagnosis in the third case, a child aged 9 mo. This is the first condition to suspect in an infant during his second 6 months of life whose mother gives the following story: "The baby has been increasingly fretful and irritable, particularly when I go to change his diapers, or move his legs. He won't kick any more, but just lies there with his legs partially flexed, and yells when I touch him. I've fed him on condensed milk and have given no orange juice." This story makes the diagnosis. The gums around the upper incisors may or may not be red and swollen. The pain in these cases is caused by subperiosteal hemorrhages. Orange juice cured within 2 days. Suspect an error in diagnosis if

such a case, the child being under 12 mo. of age, has been called rheumatism.

It is not always easy to be sure of the presence of a non-opaque foreign body in the bronchus of a child. This boy, aged 14 mo., was admitted with signs typical of a foreign body in the left main bronchus; almost complete suppression of breath sounds front and back on the left side, and marked emphysema on the left side. However, no foreign body was rendered visible by x-rays. The onset had been sudden, 6 days before, when the child had a severe coughing spell while playing on the floor. He had coughed frequently and paroxysmally since that time. Respirations were normal, except that at times inspiration grew labored and at times there was an audible wheeze, with typically asthmatic rales. No cyanosis or chest retraction. Temperature not above 100°. At times the breath sounds were normal posteriorly but were always suppressed anteriorly. He appeared to be getting better rather than worse. This variability in signs seemed to indicate that the position of the foreign body in the bronchus shifted from time to time. Bronchoscopic examination revealed a small piece of tinfoil in the left main bronchus, which was removed successfully.

The next case is one of generalized enlargement of the lymph-nodes presenting unusual features. The diagnosis lies between tuberculosis and Hodgkin's disease, the weight of evidence favoring the former. The patient was a 6 yr. old colored girl who during the preceding 2 yr. had a firm, easily visible enlargement of the left inguinal gland and of the cervical lymph-nodes; the former was the size of an English walnut, while other nodes were palpable but small. There had been no recent increase in size, and none had softened or broken down during this period of 2 years. Radiograph showed the mediastinal nodes as large masses on both sides, extending well out into the parenchyma of the lung. General nutrition good. At no time during 5 weeks of observation did the temperature go above 100°. Intradermal tuberculin was negative to 0.1 mgm, but positive to 1 mgm. Two blood Wassermanns were negative. Erythrocytes and hemoglobin were almost normal. Leukocytes numbered 9000 to 12,000; polys 70%; lymphos. 28%; eosins 2%. The histologic picture of a lymph-node obtained at biopsy was inconclusive, showing only inflammatory reaction. In favor of tuberculosis were the greater frequency of occurrence, especially in a colored child, typical appearance of the mediastinal nodes, and positive tuberculin. Against tuberculosis were involvement of the inguinal nodes, good nutritional condition, failure to soften or break down, and normal temperature.

Two cases of acute encephalitis occurred, 1 with recovery, 1 with death. Tuberculosis meningitis had been the first diagnosis in both. The first, a colored boy of 20 mo., had been ill for 2 weeks with restlessness, irritability, piercing cries, occasional vomiting, loss of weight, and attacks of muscular twitchings. Low grade fever, not over 101°. Marked malnutrition with beginning dehydration. Marked rigidity of neck and body. Extreme irritability. Spinal fluid under high pressure, with increase of globulin and pellicle formation, but a cell count of only 4. During a month in the ward the symptoms subsided, and the weight increased from 15½ to 19 lb. Tuberculin tests and Wassermann reactions were negative. It will be interesting to follow this child for the possible development of postencephalitic syndromes.



The other instance of acute encephalitis, in a colored boy of 6 yr., had a duration of 5 days from the onset with severe pains in the head up to the death in coma. Fever of  $102^{\circ}$  to  $107^{\circ}$  and numerous convulsions followed. Pupils small and fixed. No rigidity. Spinal fluid under moderate pressure, with increase of globulin and formation of pellicle, and cell count of 26, all small lymphocytes. Necropsy revealed no evidence of tuberculosis, but only focal congestion in the brain.

Two cases of dysentery caused by the dysentery bacillus (Hiss-Russell) will be mentioned because of the late development of the condition, the onset of the one on Oct. 7 and of the other on Oct. 10. Dysentery is usually met here in August or early September, rarely as late as October. Both were severe and typical cases, with blood-streaked watery stools containing mucus and pus. They were handled successfully by an initial starvation period with intraperitoneal injections of normal salt solution, followed by increasing amounts of reinforced protein milk with dextrimaltose, i. e. skimmed buttermilk with junket curd.

The last case is one of lung abscess in a girl of 8 years. Five days after removal of her tonsils and adenoids severe pain developed in the lower left chest. Several days later 11 oz. bloody serous fluid were aspirated from this side. She was admitted 3 weeks after the operation because of recurrence of pain in the chest and a persistently elevated temperature of  $101^{\circ}$  to  $104^{\circ}$ . In spite of all the physical and roentgenographic signs of fluid in the left side, 3 attempts to obtain fluid failed to yield a drop. Evidently the main lesion was one of unresolved pneumonia. Three weeks after admission temperature was still  $101^{\circ}$  to  $103^{\circ}$ , but the signs indicated resolution of the general process. However, radiograph showed a localized area of thickening and of retracted pleura, suggesting an abscess. Dr. Johnson inserted a needle in the mid-axillary region and obtained a small amount of thick greenish pus from a small cavity which could not have held over 60 c.c. Convalescence has been rapid since drainage of the abscess.

## BERGEN COUNTY

Charles Littwin, M.D., Reporter

The regular meeting of the Bergen County Medical Society was held at Holy Name Hospital, Tuesday evening, February 10.

The minutes of the Annual Meeting and also of the Executive Committee were read and approved.

Approval of the appointments to the Executive Committee was voted.

The recommendation of the committee, that delinquents be notified by registered mail that unless their dues be paid in full by the March meeting they would be suspended, was moved and passed.

Applications for membership of Drs. J. Willis Demarest, Franz Kastler, and Trevalyn W. Omstead were read.

Drs. King and Hallett brought up the subject of "courtesy to the physician in court". Both have recently waited all morning without purpose. It was regularly moved and passed that the Executive Committee take up this subject with the Bar Association.

The program for the evening was presented

by Dr. Louis René Kaufman, M.D., F. A. C. S., Professor Urology and Head of Urologic Section Flower Hospital; his subject being "Recent Advances in Diagnosis and Treatment of Urologic Lesions; Uroselectan; Prostatectomy". The talk was illustrated by original motion picture film.

## BURLINGTON COUNTY

Roscius I. Downs, M.D., Reporter

A regular meeting of the Burlington County Medical Society was held Wednesday afternoon, January 14, in the Burlington County Hospital, at Mount Holly, under the President, Dr. Joseph M. Kuder, with 14 members present.

Because the State Medical Society decided to continue the Post-Graduate course of instruction, Dr. Kuder had appointed the following committee: Drs. Richard D. Anderson, Chairman; Howard C. Curtiss and Marcus W. Newcomb, to determine upon the course desired, time and place of meeting, and to give assistance in organizing our membership into groups subscribing to these courses. Dr. Anderson's report stated: that questionnaires were sent to 49 doctors, that 13 replies were received and 7 would take the course, but it is necessary to have an enrollment of 20 to have the course given at Mt. Holly.

There were 3 applicants elected to membership: Drs. P. H. Corpening, of Marlton; Eugene A. Meyer, of Moorestown; Francis H. Borzell, of Philadelphia.

Dr. Richard Anderson was elected Historian of the Society, as Dr. Joseph Stokes felt that he had not the time necessary for the work.

A letter of resignation from Dr. I. W. Hollingshead was read, and received with regret.

Dr. Harry L. Rogers, Chairman of the Section on Practice of Medicine, took charge of the meeting and announced the following program:

"Agranulocytosis", by David S. Farley, M.D., of Philadelphia.

"Consideration of the Causes of Diarrhea", by E. W. Rodman, M.D., of Beverly, N. J.

Dr. Farley commenced by saying that the term agranulocytosis means an increase of granular cells, while the disease really shows a decrease of the granular cells, therefore, agranulocytopenia is a better term. In 1922, agranulocytic angina, a rare and fatal condition, was described. The causes of this disease are divided into 3 groups: first is from chemicals, mainly following the use of arsphenamin; the second, is from radiation, as following the use of radium and x-rays; the third is from unknown causes and is by far the largest group.

The characteristics are leukopenia with pronounced reduction of polymorphonuclear neutrophils, decrease of blood-platelets, alteration in bone marrow. There is no change in the erythrocytes or hemoglobin; no purpura or bleeding.

Three cases were described. The first followed administration of neo-arsphenamin. A man, 33 yr. of age, complained of soreness of the mouth and eruption of the skin. He had been given 5 doses of neo-arsphenamin at weekly intervals. After the fifth dose he had sore throat and conjunctivitis. He was given the sixth dose and developed sore throat, jaundice, a toxic condition, enlarged spleen, a typhoid type of fever and died in 11 days. Another case was of a child 3 yr. of age, following an influenzal attack, Marked pallor,

yellow skin, marked anemia, enlarged liver and spleen developed.

The treatment is symptomatic. Use sodium theosulphate in arsenic cases as soon as possible. Use many blood transfusions, radiation of the long bones, ultraviolet light, liver extract. Shock treatment consists of intravenous injection of typhoid vaccine, and also the use of fixation abscess by injection of turpentine. This last is quite painful. The abscess must be opened.

Dr. Rodman's paper was so definite and complete that the society requested its publication in full in the Journal.

### CAMDEN COUNTY

R. S. Gamon, M.D., Reporter

The monthly meeting of the Camden County Medical Society was held Tuesday, February 3, at 9 p. m. Dr. E. G. Hummell, Vice-President, presided in the absence of Dr. W. J. Barrett, President, who is on vacation in Florida.

This meeting was the annual Case Report Night and the program consisted of the following:

(1) "Loss of Sugar Tolerance in a Diabetic", by Dr. A. J. Casselman.

(2) "Two Cases of Stone in the Urothra", (with lantern slides), by Dr. D. F. Bentley, Jr.

(3) "Epidemic Cerebral Spinal Meningitis with Recovery and Secondary Total Nerve Deafness", by Dr. Jos. E. Lovett.

(4) "Streptococcus Faucitis with Erythema Nodosum and Erythema Multiforme Exudativum", by Dr. Hyman I. Goldstein.

(5) "Sub-total Gastrectomy for Carcinoma of the Pylorus" (with lantern slides), by Dr. P. M. Mecray.

(6) "A Case of Appendicitis with an Unusual Complication", by Dr. E. Shull.

(7) "Bilateral Congenital Dislocation of Hips" (with lantern slides), by Dr. O. Carlander.

The Committee on Rutgers Post-Graduate Extension Work reported that applications will be in the hands of members in the near future.

Drs. E. A. Y. Schellenger, 414 Cooper st., Camden, and Max Rutenberg, 210 State st., Camden, were elected to membership.

Appropriate action was taken upon the death of Dr. E. E. DeGroff, Woodstown, who passed away January 6, 1931.

The meeting was well attended.

### ESSEX COUNTY

E. LeRoy Wood, M.D., Reporter

The Essex County Medical Society was host to the Medical Societies of Union, Morris and Warren Counties which together constitute the First Judicial Council District of the State Medical Society, Thursday evening, February 12, 1931.

The Essex County Medical Society elected 9 new members: William M. Brams, George M. Cohn, Geza M. Frank, Harry Klein, Sol Parent, Christopher J. Reilly, Henry M. Woolman, and A. Russell Sherman, all of Newark; C. Franklin Turner, Montclair.

Dr. Henry C. Barkhorn, President of Essex County Medical Society, called attention to a series of meetings being held each Wednesday evening at 8.15 at the Academy of Medicine in Newark to consider the subject of "Industrial Poisonings". The meetings have been organized

by the Safety Council and endorsed by the Medical Society. There will be 4 meetings, February 18, February 25, March 4, and March 11, addressed by prominent members of the profession, authorities on their subjects.

Dr. E. G. Wherry, Chairman of the Medical Milk Commission, offered a resolution, which was passed by the society, supporting the use of clean raw milk in certain cases in preference to pasteurized milk. The resolution backed the stand taken recently by Dr. J. G. Lipman, Director of the State Agricultural Experiment Station at New Brunswick, in opposing "an organized effort by milk dealers to eliminate raw milk as a market commodity even though such raw milk may be entirely safe to use and of greater food value than pasteurized milk".

The medical milk commission called attention to the fact that certified milk, produced and distributed raw under medical supervision, "affords utmost security in this most important article of human food". Dr. Lipman's opinion was expressed in a letter to the International Association of Milk Dealers which had asked his opinion on the advantages of pasteurized milk. He referred to pasteurization as "the lesser of 2 evils" and declared health officers are "right in insisting on pasteurization of all but the finest grades of raw milk".

The medical society resolution read: "The question of the place of raw milk and its supervision by the government suggests the reminder that certified milk is the standard by which all grades are judged. Being raw and certified by a medical milk commission under very rigid requirements of law, it affords the utmost security in this most important article of human food and is indispensable for infants. The Essex County Medical Society reiterates its frequent action recommending certified milk, not only because it is raw but because its purity is unaltered by any process in any respect."

After the local business was completed, the meeting was turned over to Dr. A. J. Ward, Secretary of the Morris County Medical Society, who presided and introduced the speaker, Dr. William H. Ross, President of the New York State Medical Society. After the reading of Dr. Ross' paper, Dr. J. B. Morrison read one on the "Possible Advent of State Medicine", and discussion was carried on from the floor to a late hour.

The combined meeting was considered a great success and Essex felt honored by the privilege of entertaining her neighboring societies.

### Academy of Medicine of Northern New Jersey Eye, Ear, Nose and Throat Section

E. LeRoy Wood, M.D., Secretary

Several patients with interesting conditions, and reports of many instructive cases, were presented at the meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey, 91 Lincoln Park, Newark, Monday evening, February 9. The Chairman, Dr. J. Wallace Hurff presided.

In the business portion of the meeting, the chairman appointed as a nominating committee Drs. Elbert S. Sherman, Henry C. Barkhorn, and Dennis F. O'Connor.

The subject of the high price of eye glasses was discussed and general disapproval of the increas-



ing costs was expressed. One instance was cited where the ophthalmologist's prescription for a person of very moderate means, with a small refractive error, was filled by glasses costing \$50. This must work to the disadvantage of patients, because they cannot then afford the ophthalmologist's supervision sufficiently frequent. The routine urging by the optician of the more expensive lenses, such as Punktal, Orthogon, and Tillyer, for patients with small refractive errors, is likewise condemned because unless the prescription calls for a lens of 5 diopters or more, there is a negligible difference between the expensive lens and the ordinary lens. It was also mentioned that very serviceable frames can be supplied, of gold filled material, making the added expense of the solid gold and the highly decorated frames unnecessary. Drs. O'Connor and Sherman suggested that a committee be appointed to study and discuss the optical question. A motion was passed to that effect.

Dr. A. Russell Sherman, of Newark, who recently returned from an extended visit abroad, described in a very practical and interesting manner the Eye Clinics in Vienna, Austria; his complete paper will be published in the Journal at some future date.

In the clinical portion of the meeting, Dr. Lee W. Hughes showed 2 patients. The first, a man from whom he had removed a retrobulbar tumor, giving the following description: This patient came to my office on October 3, 1930, complaining that there had been a protrusion of the left eyeball for past 7 years and shortly after the condition was noted he consulted a physician. Radiographs were taken and a tumor mass localized behind the left eyeball and to the outside. An operation was advised but refused. The condition had grown progressively worse and tumor had increased to almost twice its size. Patient stated that whenever he lifted heavy objects or leaned forward there was a further protrusion of the eyeball, sufficient to cause him great annoyance, and he feels that he is unable to pursue his occupation, which is that of a mason. He requested that an operation be performed. No history of injury; had always enjoyed good health. Married, and father of 7 children all well and healthy. No history of eye trouble in family. Vision O.D. 20/20; O.S. 20/200. There was a marked proptosis of the left eye which was practically 1/3 out of its socket; eyeball appeared to be fixed and stationary. The anterior structures were healthy; cornea clear; pupil round, regular, reacted to light and accommodation. General fundus was negative. Field of vision normal. Upon light palpation a tumor growth could be distinctly felt and this appeared to be in the upper and outer part of the orbit and apparently fairly adherent to the superior and lateral walls of the orbit.

Retrobulbar tumors are usually slow in growth and are to be differentiated from orbital cellulitis or acute inflammatory processes by the absence of swelling or edema of the structures surrounding the eyeball. Even though the movements are greatly limited or even immobile, there is a gradual stretching of all the muscles and tissues attached to the eyeball so that sometimes useful vision is maintained. In slow growing tumors there is stretching of the optic nerve so insidious that no changes are noted upon examination of the fundus. There is usually marked proptosis, depending, however, upon the size and location of the tumor. In deeply situated tumors

the external orbital wall must be removed to gain free access to the orbit, and the operation of choice is the so-called Krönlein operation.

This patient was operated upon October 7, 1930, at the Newark Eye and Ear Infirmary, under local anesthesia (novocain adrenalin solution). The Krönlein-Kocher incision was used—a curved incision extending from the junction of the middle and inner third of the brow downward to the fold of skin approximately 10 mm. from the outer canthus, and then continued toward the temple for a distance of 3 to 4 cm. The tissues were separated down to the bone and the upper arm of the zygomatic bone was removed. The periosteum of the orbital cavity was incised above and below to allow free separation of the tissues of the outer wall of the orbit, being careful not to cut any of the muscular attachments of the eyeball. The tumor was readily outlined and by finger dissection was removed from its attachment. Following removal of the tumor the eye receded into the orbit in the normal manner. The muscles were approximated by 00 catgut and skin edges sutured with fine silk. The wound was closed tightly.

There was considerable swelling of orbital tissue following operation and on the fourth day patient was discharged and told to report to the office for further treatment. On the tenth day a hematoma was opened in the brow and a large amount of blood evacuated, and 10 days later the wound had firmly healed. Four weeks from the operation patient was able to read 20/20 in left eye. The last examination made on January 27, 1931, vision was 20/20 in each eye without correction. No diplopia with or without red glass when fusion is broken; 12° esophoria distance; 1° right hyperphoria distance.

The tumor was sent to the laboratory and the following measurements given: Length 39 mm., breadth 26 mm., depth 22 mm. Sections made and description given: tumor is composed of many dilated blood vessels filled with blood and lined by inactive endothelium. There is a considerable amount of fibrous tissue stroma which appears to take part in the tumor formation. No evidence of malignancy.

Diagnosis: cavernous fibro-hemangioma.

Dr. Hughes presented his second patient having the interesting condition, keratoconus, as follows:

This patient came to my office on December 3, 1930, with a request from the United States Veterans' Bureau for an examination of eyes, ears, nose and throat. The patient stated that he was discharged from the Army in 1919 and was then told that he had a cataract in the right eye. Realized that the vision was poor at that time but since the vision in the left eye was practically normal, and the right eye did not cause him any annoyance, he did not seek further medical advice, taking as final the statement of the army doctor that nothing could be done to improve the vision in the right eye. He has been working as a night watchman and has experienced little difficulty in attending to duties. However, during the past 3 or 4 years he has been complaining of headaches (especially in the region of the temples), some difficulty in nasal breathing. General health has always been good; has never had any operations; family history negative so far as eye diseases are concerned. Vision: O.D. counts fingers at 4 ft. O.S. 20/50. The conjunctiva of the right eye showed a mild catarrhal inflammation. Cornea was conical in shape and the apex of the

cone was situated just below and to the outer part of the center of the cornea with a small opacity at the apex of this cone which appeared like a bleb formation. The left eye showed a mild catarrhal inflammation of the conjunctiva with a beginning conical cornea. I was unable to obtain a view of the fundus of the right eye, but examination revealed approximately 2.75 diopters of myopic astigmatism, which corrected did not improve the vision. Examination of the left eye revealed 3 diopters of myopic astigmatism which corrected the vision to 20/30. It is my impression that there is a higher degree of astigmatism in the cornea of the right eye than that noted by the keratoscope.

*Keratoconus.* The central part of the cornea very gradually and without inflammatory symptoms begins to bulge forward in the form of a cone. At first the cornea is perfectly transparent and its peripheral portions keep their normal curvature, but with a continual bulging of the cornea the apex of the cone becomes opaque with an uneven surface.

Keratoconus first makes itself apparent to the patient by disturbance of vision. The eye becomes myopic but there is usually astigmatism. It is a rare disease which as a rule affects both eyes, beginning usually between the twelfth and the twentieth year and very gradually in the course of years coming to a standstill. There is no increase of tension; neither is there ulceration or rupture of the cornea. A keratoconus of slight degree may be easily overlooked, since the cornea is transparent, and where there is even the slightest suspicion of this condition the cornea should be carefully examined by Placidos keratoscope. The corneal reflex is irregular in outline and the apex of the cone is not usually in the center of the cornea but somewhere below it.

Treatment is very unsatisfactory. Where the patient has been under observation for some time and we are satisfied that the condition is stationary, it is best to content ourselves with a correction of the refractive error, which is usually a moderately high degree of myopic astigmatism, by concave spherical glasses alone or in combination with a cylinder. In certain selected cases improvement of vision is secured by the use of discs with stenopeic holes or slits, the size and shape of these to be determined by examination.

Certain men have operated for conical cornea but the results have only been imaginary and not convincing either to their patients or their fellow practitioners.

*Dr. Dennis F. O'Connor* described in detail persistent pupillary membrane and showed patients with the condition.

*Dr. Andrew Raos* showed a patient who had recovered, with good vision, from sympathetic ophthalmia following enucleation of the other eye. The opportunity to examine this patient was most valuable.

*Dr. E. A. Curtis* read the following description of Infantile Tay-Sachs Disease, an example of which he had recently seen in one of his patients in the Newark City Hospital.

In 1881 a case was reported by Dr. Tay with the title, 'Symmetric Changes in the Region of Macula in Each Eye of an Infant'. In 1887, Dr. Sachs reported a case of blindness associated with idiocy, entitled 'Arrested Cerebral Development'. Nine years later he also recognized the familial elements in the disease in another case, and gave it the name of 'Amaurotic Family Idiocy'. These

diseases occur between the age of infancy and 35 years. The different varieties are infantile, juvenile, and adolescent.

#### CASE REPORT

Hebrew boy, 13 months old, normal delivery, full term, weighed 8 lb. at birth; parents not blood relations. The child was admitted to the Newark City Hospital on October 25, 1930, weighing 23 lb. Since birth the child has been backward, took no notice of its surroundings, and did not appear to see or hear. He began to have convulsions 2 weeks before admission. During these attacks he became cyanosed, with toxic spasm of both hands lasting 3 to 4 minutes. He had 10 or 12 of these in all. During these last 2 weeks, the child had changed perceptibly. While in the hospital, he would lie quietly with no reaction to any of his surroundings. He was a well-developed, normal looking child. When placed upright, he would fall over in any direction. The anterior fontanelles would admit 1 finger, and the posterior fontanelles were closed. There was a paralysis which was flaccid. The reflexes were deficient. A fast pulse but the heart was normal, and his chest was normal. No glandular involvement, and no bone tenderness. The urine was negative. No nystagmus and no strabismus. Temperature ranged from 98° to 105°. Died October 30, 1930.

#### Memorial Tribute to Dr. Charles J. Kipp

E. LeRoy Wood, M.D., Reporter

Leaders of the medical profession in North Jersey met at the Newark Eye and Ear Infirmary Sunday afternoon, January 18, to pay tribute to the memory of Dr. Charles J. Kipp, Founder of that institution, who died 20 years ago—January 13, 1911. Mr. Edgar Heller, President of the Infirmary, presided at the simple exercises in which representative speakers recalled Dr. Kipp's services to the community.

On the program were Drs. Edward J. Ill, of Newark; Norton Wilson, of Elizabeth; John F. Hagerty, Medical Director of St. Michael's Hospital; Frank W. Pinneo, Secretary of the Essex County Medical Society; and Wells P. Eagleton, Medical Director of the Infirmary. Each of the speakers had been a friend and colleague of Dr. Kipp.

With Dr. William R. Rankin, Dr. Kipp 60 years ago founded the first eye and ear clinic in Newark, at St. Michael's Hospital. He was credited with being the first to describe manifestations of abscess of the brain in the eye, and the influence of malaria on the eyes. In addition to founding the infirmary, Dr. Kipp was closely associated with the late Dr. Henry L. Coit in the establishment and development of Babies Hospital, Coit Memorial, and with others in planning the New Jersey State Sanatorium at Glen Gardner. Mt. Kipp, near Glen Gardner, was named in his memory. Dr. Kipp was active also in the origin of the Society for Widows and Orphans of Medical Men, the Journal of the Medical Society of New Jersey, and the Medical Library Association of Newark, now the Medical Library of the Academy of Medicine of Northern New Jersey. The building of the Newark Eye and Ear Infirmary, a monument to Dr. Kipp's vision, was built from contributions of Robert T. Ballentyne, Frederick Frelinghuysen and J. William Clark. When the



clinic from which it grew was started in 1880 by Dr. Kipp, there was a budget of \$750.

*Dr. Edward J. Ill* related from memory many personal incidents, being acquainted with Dr. Kipp from the time he came to Newark in 1868.

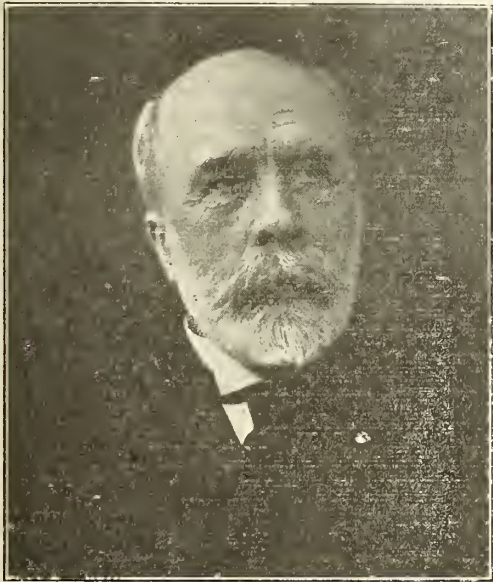
*Dr. Norton L. Wilson* paid the following tribute to Dr. Kipp: "We are gathered here today to do honor to the memory of one who established this Institution and did much for the City of Newark. Dr. Charles J. Kipp came to this country from Germany. He graduated from the College of Physicians and Surgeons in New York in 1861. About that time the War of the Rebellion broke out and he enlisted as a surgeon with the Northern Army, serving faithfully and well. Those of you who attended his funeral service will remember the tender words of Dr. John Wyeth, who served in the Southern Army as a surgeon, paying high compliment to Dr. Kipp, praising

instructor but also my friend. May his memory ever be cherished in our hearts."

*Dr. John F. Hagerty* spoke as follows: "I deem it a great privilege to represent St. Michael's Hospital at this splendid gathering of distinguished men and women, assembled to do honor to the memory of Dr. Charles Kipp, who was a member of our Medical Board during the early years of its organization and who established there, 60 years ago, an Eye and Ear Infirmary, the first of its kind in the state of New Jersey, and continued its active and guiding force for many years. The success and, indeed, the permanency of many institutions is largely dependent upon the start which they receive, and St. Michael's Hospital was exceedingly fortunate in having for its sponsors and guides during its formative period a remarkable group of men whose names are held in grateful and reverent memory in many homes of our city, not the least worthy among them being the subject of this gathering. They were wholeheartedly and devotedly interested in the welfare of this young hospital, the second to have been started in the state, St. Barnabas having preceded it a very short time, and are, in large measure, responsible for its successful continuance during all the succeeding years. Dr. Kipp was so convinced of the necessity for such an institution and of the benefits to be derived from such a clinic that he fitted it out with all necessary instruments and apparatus at his own expense, some of which are still in use at the present day. It is not easy to put into understandable terms the value of such interested and devoted lives as these, but their successors are always aware of some intangible force and stimulus which enable them to carry on in sustaining their ideals. Dr. Howard Kelly said: 'Even a cursory glance at the deeds of the illustrious dead should encourage those who are left to pass along the torch to greater zeal in their daily tasks.'

I trust I may be permitted to refer to my own acquaintance with Dr. Kipp. Soon after coming to Newark I learned that he was one of the outstanding figures among the medical men of that day and, indeed, the most prominent of them all. And I had not been long connected with St. Michael's before learning of his wonderful work there and the indelible impress his talents and skill had left upon that institution. I had the good fortune later to become a member of the Medical and Surgical Society with which he was actively identified, and can testify to the remarkable influence he had upon every member of the society. Upon hearing him talk one felt that he was in the presence of a Master, of one possessed of abundant knowledge acquired by study and travel and experience. He had a very direct, lucid and convincing way of telling a thing, and we listened when he spoke and were educated and stimulated to aspire to higher and better things.

I wish to thank Dr. Eagleton for his kindness in permitting us to be here, and to compliment him upon his thoughtfulness, not only in keeping alive the memory of one whom I know he reveres as his mentor and guide, but in helping to perpetuate the beneficent influence of a good name and an active and useful life. Pasteur, the great French scientist, whose marvellous accomplishments were wrought during the life period of Dr. Kipp, looked upon the cult of great men as a principle of rational education. 'From the lives of men whose passage is marked by a trace of durable light', he said, 'let us piously gather up for the education of posterity, every



DR. CHARLES J. KIPP

his skill and devotion to the sick and wounded not only of the Northern Army but also those of the enemy. He related the story of Dr. Kipp saving his life by his skill and devotion and they remained staunch friends ever after.

I well remember when I first became associated with him, at the old Infirmary on Sterling Street, in 1885. He was then at the pinnacle of fame, and was one of the foremost oculists in America. He was a student and a dextrous operator. He was exceedingly modest, and a man of few words, which caused many to think him gruff, and yet I have seen him as tender as a woman in handling a child. His contributions to medical literature were of the highest character. He never married, but devoted his entire life to his profession. This institution was his child and he gave of his means and very life that it might live. He was the 'old type gentleman', never indulging in excesses of any kind. He acquired a stoop in his shoulders from his devotion to study; and was somewhat deaf in one ear, which made him sensitive in conversation. It was my good fortune to have served under him for a period of 8 years and during that time he was not only my

detail down to the slightest words, likely to make known the incentives of their great souls.'

We are grateful for the opportunity of attesting our high regard for the memory of Dr. Kipp and appreciate the good that will result from reflection upon his life and work."

Dr. Frank W. Pinco said: "Dr. Kipp was the first President, and only Life Member, of the Medical Library Association of Newark. During October 1905 subscriptions 'to establish a medical library and organize a Medical Library Association' had been secured by some personal solicitations and when these reached 130 names it was suggested that an organization meeting be called. The plan included the coöperation of Mr. John Cotton Dana and the Trustees of the Public Library in providing the place in the services of trained librarians, while the Medical Association would hold possession of its books. Dr. Kipp took such interest in the success of the movement that he wanted the plan of this coöperation assured before organizing, and when informed this had been secured a meeting was held on November 18, 1905, and the Association was formed. Dr. Kipp was, with universal approval, elected the first President and, the next day, sent a check for the Life Membership fee, thus becoming the first life member.

After organization of the Academy of Medicine of Northern New Jersey and its possession of a home, an agreement was negotiated, May 18, 1921, merging the 2 associations whereby the property of the Library Association, accumulated through the 16 years, with its cash balance as a Library Endowment Fund, was transferred to the Academy which agreed to 'maintain, operate and develop' the medical library."

Dr. Wells P. Engleton, who has been Medical Director of the Eye and Ear Infirmary since Dr. Kipp's death, read the tribute paid on that occasion by the staff of the institution: "This institution was founded through his instrumentality and he brought with him a body of personal friends who undertook the work because they were assured, by being associated in a beneficent work with a man preëminently qualified by magnificent ability and great nobleness of character."

In the minds of those who knew Dr. Kipp the memory needs no sustenance but the attention of those who follow is directed to his character, the ideals which he so nobly exemplified and his life of generous service.

Following the service Dr. Engleton entertained the staff of the Infirmary at dinner at the Essex County Country Club, West Orange.

#### Honor to Dr. Max Danzis

E. Leroy Wood, M.D., Reporter

More than 200 medical associates and friends gathered at the Newark Athletic Club to pay honor to Dr. Max Danzis, for many years chief of staff of Newark Beth Israel Hospital. Speakers dwelt on his long services to the community and the aspects of his work that have gone beyond the usual sphere of the physician in social and scientific accomplishment. A framed scroll containing resolutions was presented to Dr. Danzis by the hospital's medical staff, which gave the dinner.

The speakers included David I. Kelly, secretary of the Essex County Park Commission; Frank I. Liveright, president of Beth Israel; Dr. Nathaniel G. Price, and Dr. Henry C. Barkhorn, who was

toastmaster. Dr. Danzis responded. Features of the program were several piano solos by Rev. J. Pierre Connor of Our Lady of Lourdes Church, West Orange, and vocal solos by Paul Largay. The arrangements were directed by Dr. Paul Keller, executive director of Beth Israel.

At the speaker's table also were Dr. Edward J. Ill, Dr. and Mrs. John F. Hagerty, Dr. and Mrs. H. J. F. Wallhauser, Mrs. Keller, Mrs. Barkhorn and Mrs. Price.

The resolutions presented to the guest of honor follow:

"Whereas, Dr. Max Danzis has served in the capacity of founder, member and chief of the medical staff of Newark Beth Israel Hospital and has exercised his duties unselfishly and with great efficiency as director of the medical staff of Newark Beth Israel Hospital, and

'Whereas, Under guidance of Dr. Max Danzis, Newark Beth Israel Hospital from a humble beginning has reached a plane whereon it is one of the leading medical institutions of the country. Therefore be it

Resolved, That the medical staff of Newark Beth Israel Hospital does hereby express its appreciation of the unselfish services rendered to this institution and to the community at large by Dr. Max Danzis during his long years of service; that the staff does further express its gratitude for the understanding and utmost patience and unflinching fortitude with which Dr. Danzis has ever performed such service; and be it further

Resolved, That the staff hereby records its appreciation of the quality and extent of the work done under Dr. Danzis' direction, and trusts that it may continue to enjoy his just management for many years to come."

#### First Councillor District

Albert J. Ward, M.D., Reporter

Through the courtesy of the Essex County Medical Society, the First Annual Meeting of the First Councillor District, comprising the County Societies of Morris, Essex, Union and Warren, was held in the Academy of Medicine, Newark, Thursday evening, February 12.

The purpose of these joint meetings of the county societies comprising each Councillor District in the State is to promote better acquaintance and understanding between neighboring county societies, to strengthen and solidify the profession, and so the State Medical Society, and to advance medical practice.

About 150 members of the various societies attended and the new undertaking was considered a success.

The speakers of the evening were Dr. W. H. Ross, President of the New York State Society, and Dr. J. B. Morrison, Secretary of the New Jersey State Society. Dr. Ross' topic was, "A Way to Avoid State Medicine". Dr. Morrison followed this paper with one on "Some Phases of State Medicine". Both papers were enthusiastically received, and lively discussion by Drs. Sommer, Reik, Quigley, Hagerty, Lathrope, Beling, Polevski, and other members followed.

The First District Councillor Committee wishes to extend thanks to President Barkhorn and members of the Essex County Society.



**GLOUCESTER COUNTY**

Henry B. Diverty, M.D., Reporter

The February meeting of the Gloucester County Medical Society was held February 19, with a large number of members present at the Hotel Pitman.

The meeting took place in the form of a "round table" discussion concerning the affairs of the society and an interesting discourse on the milk question. Mr. W. H. MacDonald, the acting chief of the Bureau of Local Health, took the place of Mr. D. C. Bowen, the State Health Director, who was called to Washington, and proved a very able speaker and held the attention of his listeners throughout his talk.

The members present were Drs. S. F. Ashcraft, I. W. Knight, W. J. Burkett, R. K. Hollinshed, F. G. Wandell, E. E. Downs, C. F. Fisler, A. B. Black, H. B. Diverty, Duncan Campbell, C. I. Ulmer, B. A. Livingood, Wm. Brewer, H. M. Fooder, C. A. Bowersox, Paul M. Pegau, Edwin Ristine. Delegates included Drs. Miller and Bennett, of Cumberland County; Dr. Oram R. Kline, of Camden County, and Dr. Franklin Church, of Salem County.

**HUDSON COUNTY**

E. G. Waters, M.D., Reporter

The regular meeting of the Hudson County Medical Society was held at the Cateret Club, February 3, with Dr. J. M. Cassidy presiding.

The minutes of the previous meeting were accepted as published in the Bulletin.

The president reported for the Executive Committee, speaking of a letter received from the Kings County Medical Society in reference to unethical practices of the Hudson Clinic of Jersey City, which has been referred to the State Board of Medical Examiners for action.

Communications had been received from the Gilbert Acceptance Corporation and were considered by the Executive Committee, with the decision that this was purely an individual proposition and there was no reason to make it official by the society.

The matter of re-zoning the city was discussed, and its effect upon the location of physicians' offices. The question is whether a physician is to be considered in the same category as a business man. The Executive Committee had recommended the plan of engaging a counsel to represent the society whenever necessary.

The President spoke of the notice in the Bulletin requesting members interested in having their names presented for an office, or as a member of a committee, to sign the form and return to the secretary. This was an opportunity for every member of the society to come forward if interested in doing any work. Up to the present, the response has been practically negligible.

The resignation of Dr. Maurice Shapiro as Chairman of the Publicity Committee was received and accepted, and a new appointee is to be named shortly by the President.

Dr. Edward G. Waters, as a member of the State Committee on Post-Graduate Instruction, asked concerning the plans of the local committee, as the State Committee was waiting to hear of the plans of the local committee, and thus avoid complication.

The revision of the Constitution was presented, read article by article, and adopted.

A communication from the Hudson County Tuberculosis League, inviting the membership to attend a series of lectures on "Occupational Diseases" to be held in Newark, was read.

Classified Advertising: Dr. H. C. Benjamin stated that the Telephone Company had been soliciting the profession to place an advertisement in the classified section showing office hours and specialties.

Dr. F. Quigley moved that the members of the society should not participate in this until after it had been considered by the Executive Committee. Dr. M. Swiney moved to amend that the county society 's against such a practice.

Dr. C. B. Kelley wanted a definition of "medical advertising". He stated that practitioners not in the society would advertise. He advocated the publication of a list of members of the Hudson County Medical Society under such a heading.

Dr. I. L. Gordon stated that from the information he had received only the office hours were to be published, but suggested that we get a definite statement from the Telephone Company.

It was incidentally mentioned that the classified list contained the names of other than regular qualified practitioners. Dr. Kelley stated that the Board of Medical Examiners had taken this matter up with the Telephone Company and that it was coöperating to eliminate the names of any but regular practitioners. Further discussion by Drs. Nelson and Perlberg. The amendment of Dr. Swiney was lost; the motion of Dr. Quigley was carried.

It was regularly moved and seconded that the Secretary be authorized to notify the Telephone Company to hold this matter up until it had been sanctioned by the society.

Dr. S. Yachnin stated that some companies are distributing lists of business and professional men to apartment houses. Dr. H. C. Benjamin moved that the Executive Committee consider this matter. The motion was carried. The members were asked to send in any information concerning such procedures to the Secretary.

Dr. F. McLoughlin spoke on the rule of the American Medical Association that all hospitals to be approved must have 20% of postmortems. He stated that the undertaker stood in the way and suggested that this society take the matter up with the Undertakers' Association. It was regularly moved and seconded that a committee be appointed by the president to confer with the Undertakers' Association relative to this matter and secure its coöperation in dealing with the relatives of the deceased in an endeavor to limit this conflict.

Dr. Cassidy stated that this is a very vital question to those interested in hospitals and therefore merits serious consideration.

Dr. W. Barbarito felt that it should be the duty of the hospitals themselves to get together and work out this problem. Dr. Nelson suggested that the Secretary get in touch with the State Society Secretary and have it taken up with the State Undertakers' Association.

Dr. Larkin believed that this is a local problem and that the County Board of Health and the County Physicians should be asked to coöperate.

The following applications were received and referred to the Board of Censors:

Drs. John L. Varriano, Jacob A. Riese, Samuel A. Cohen, Henry C. Fattel, and Arthur Trewbella.

The following applicants having been approved by the Board of Censors were unanimously declared elected as members: Drs. William F. Schuchner, Benjamin Leavitt, Perry O. Hall, all of Jersey City, and Morris Green, of Weehawken.

Dr. Thomas White, reporting for the County Committee on Post-Graduate Instruction, stated that the program had been completed and was to be given in conjunction with the State Committee. The 2 subjects were obstetrics and gastrointestinal diseases. They were to include lectures, ward rounds, case illustrations, and obstetric demonstrations, to take between 1½ and 2 hours. The course was to be partially clinical, and was to commence after Easter. The members to be given further information through the mail. It was regularly moved and seconded that this report be accepted.

### Scientific Program

*Dr. Charles B. Kelley: "Gynecologic Thoughts".* This symposium has been arranged at the request of our president, in furtherance of his ideas that local talent can produce programs sufficiently interesting to attract the membership of this society. It has given me a great deal of pleasure to help arrange this presentation, and I have reserved for myself the introductory position in order to outline to you just what our group has attempted to do in carrying out the experiment; whether noble or otherwise we will leave to your judgment. At first glance, our program may appear extremely ambitious; perhaps it is. We have arranged 6 papers which will be covered in very little over an hour's time. Necessarily, only the high spots can be touched by each essayist, but I feel sure this will result in concentrated papers, full of facts.

Gynecology is the mother of all abdominal surgery. In 1809, Ephraim McDowell removed, for the first time, a large ovarian cyst, and abdominal surgery had its inception in a gynecologic operation. There can be no doubt, historically, that by this operation McDowell earned for himself the title of "Founder of Abdominal Surgery". Not only did he revolutionize the treatment of ovarian cyst, which up to that time had simply been abdominal paracentesis, but he demonstrated for the first time the possibility of invading the peritoneal cavity. The awe in which the peritoneum had previously been held was dispelled and it was not long before general abdominal explorations had over-shadowed in importance the primary gynecologic event.

As this is a symposium in gynecology it would perhaps be well to define gynecology. Dorland defines it as being that branch of medicine which treats of woman's constitution and diseases, especially of the genital, urinary and rectal tracts. The definition is perhaps a little broader than usually accepted although the ability to properly diagnose rectal and urinary diseases is certainly quite properly required of the gynecologist.

As my contribution to this symposium, I would like to offer some general thoughts about gynecologic diagnosis and in so doing I would emphasize the fact that gynecologic conditions, with the exception of hemorrhage and ectopic pregnancy, are seldom urgent. Even ruptured ectopic pregnancy is often best treated expectantly. The term "acute surgical abdomen", in the sense of

meaning immediate operation, seldom applies to the female pelvis. Consequently, in the great majority of cases, the opportunity for careful study is present.

The gynecologic history is of a fair amount of importance, but the examination is of far greater importance. A general, physical examination should precede the strictly gynecologic one. This does not have to be slow nor too detailed, but should include listening to the heart and lungs to rule out gross lesions and, of course, should include an abdominal examination. It is well to remember that heart disease often shows itself as uterine hemorrhage.

A digital examination of the rectum and also a proctoscopy are often very important, as lesions of the rectum are often the etiologic factors in gynecologic complaints. Many a dysmenorrhea is due to an anal fissure and more than one retroverted uterus has been due to a redundant and impacted sigmoid. I have seen many cases of retroversion cured by properly given colonic irrigations.

Cystoscopic examination is often a big help, and everyone doing gynecology should be able to distinguish the ordinary bladder lesion. Emptying the bladder before a vaginal examination is important. A full bladder may easily be mistaken for a fibroid uterus.

Lumbar pain is due in many instances to causes other than gynecologic, and it is always well to exclude orthopedic conditions as etiologic factors of a backache. Finding a retroverted uterus does not necessarily mean that it is the cause of a backache. More than one abdomen has been opened for pain when the pathology was a tuberculous spine or a dislocated sacro-iliac joint. Bimanual vaginal examinations will be helpful in finding pathology in many instances. It seems unnecessary to say that every gynecologic examination should include the use of a speculum; it is surprising that a different impression of a cervix is gained through a speculum than is obtained by digital examination.

In recent years, introduction of the insufflation test of the fallopian tubes has been of great value in cases of sterility. But even better than the gas test is the injection of iodized oil into the tubes; a very reliable and permanent x-ray record may be thus obtained.

A very important diagnostic aid is the curet, as this instrument is of far more importance in diagnosis than it is in treatment; and there is a world of truth in that statement.

The laboratory is becoming more useful in gynecologic diagnosis. Routine urinalyses and blood counts have their spheres. The sedimentation test is often a valuable diagnostic aid. The Ascheim-Zondek test seems to be proving its value in early diagnosis of pregnancy, which of course makes it valuable in cases of suspected ectopics. Basic metabolism readings become of value in interrelated ovary and thyroid disturbances. Biopsies and laboratory sectioning are most important diagnostic aids.

I once heard John B. Deaver say that "when all other diagnostic aids fail, there still remains the aseptic scalpel". Fortunately, in gynecology we are getting further away from this philosophy. Exploratory laparotomies are much less frequent than they were. While the opened abdomen still reveals some surprises, we have much more



definite pre-operative ideas of the pathology than formerly. Due to improved diagnosis, conditions that were once quite problematic have been reduced to a more definite basis.

This subject of gynecologic diagnosis might easily use up the time allotted to the entire symposium, but the attempt of our group has been to give you a real snappy program and consequently I am pleased to move along, well within the time assigned me and to give way to those who are to follow.

### "Non-Malignant Lesion of the Cervix"

*Dr. F. J. Quigley:* Any consideration of diseased conditions of the uterine cervix should be prefaced by that of the histologic structure of this important portion of the female generative tract. In thinking of the diseases to which it is subject we must ever bear in mind the fact that its lining mucous membrane is abundantly furnished with glands the behavior of which, if infected or traumatized, is definitely characteristic. The endocervix, especially, is equipped with a deep epithelial layer in which are many compound racemose glands, normally secreting a considerable amount of mucus. Under pathologic stimulation the output from these glands is enormously increased. Should drainage also be defective—which is most likely to be the case—the conditions will favor the setting up of a chronic condition which will not be associated with a glandular origin. Treatment will be directed toward the lesions presented by a condition of such long-standing that its actual source may be entirely overlooked.

The commonly occurring inflammations of the cervix of the uterus are customarily divided into those which affect only the intracervical mucous membrane—endocervicitis—and those which take place in the squamous epithelium of the cervix's vaginal aspect, in its glands, its muscular structure, or the entire lining mucosa of the cervical canal, which we term *cervicitis*. These inflammations are due in nearly all cases either to gonorrheal infection, or the entrance of some other organisms during parturition, or other manipulation and trauma to the genital canal.

It is probable that trauma alone would seldom bring about extensive inflammatory changes in the cervical mucosa. It is the practically inevitable entrance of bacteria and their retention and propagation in the glands, which lead to chronic inflammation with eventual invasion of the deeper structures, with the establishment of the wide variety of pathologic conditions making up the bulk of the gynecologist's daily practice. The necessity for prompt recognition of such a situation and its adequate treatment, should need no emphasis. Cervicitis begins most often in simple erosion. Viewed through the speculum, such an erosion appears as an area of congestion upon the vaginal aspect of the cervix, most often on the anterior lip. Its salmon-pink color differentiates it sharply from the normal tone of the surrounding mucosa. A section of the involved tissue will sometimes present a rough surface with a partial covering of columnar epithelium. If healing is already well advanced, the surface will be relatively smooth and a covering of squamous epithelium be visible. In the follicular type of cervical erosion, the involved glands in the deeper tissues will have undergone a certain amount of cystic degeneration, with infiltration by round

cells, polynuclear leukocytes and the prevailing type of invading organism.

When cervicitis is due to gonorrheal infection—less often if some other organism is responsible—the immediate result of invasion is hypersecretion from the racemose glands. When the infection has become chronic we have hyperplasia of these glands, and this may later bring about stricture or even complete occlusion of the cervical canal. With this interference with drainage, the conditions for continuance of the infection become even more favorable. The retained secretions macerate the tissues, stimulating them to greater activity, resulting in still further hyperplasia and the discharge of an even more excessive secretion. The difficulties which are experienced in breaking the vicious circle thus initiated are many, and vexatious to patient and physician alike.

The use of local applications—iodin, nitrate of silver, sulphate of zinc—has long been the regular gynecologic routine, followed by douching and the insertion of tampons. In a certain percentage of cases these measures relieved, or even cured the patients. More often the effect was briefly palliative, or wholly ineffectual. High amputation, which removed all the affected tissue, often found favor, but in many instances the cure has proved far worse than the original disease. Far better is the Sturmdorf procedure, which excises the diseased glands but leaves most of the muscular structure. If we are faced with a condition of long-standing, old tears with extensive scar tissue, nothing but radical measures will be of any avail. Operation thus becomes our only alternative. Milder treatment, as by cauterization or diathermy, has no place in such conditions.

The erosions following recent delivery, and the cervicitis seen at this time, can often be well handled by diathermy, provided they have not been too long neglected. Heat treatment should not be used if pelvic cellulitis is present, or in the early acute stages of inflammation, particularly that of gonococcal origin. In chronic gonorrheal cervicitis diathermy is particularly successful. This organism succumbs at a temperature of 113°. Within the cervical canal it is possible to maintain a temperature of 116° to 118° F. without the slightest discomfort to the patient nor damage to the tissues, for a period of 40 minutes or more. The indications for use of this agent are, however, too limited to permit its very general employment in the routine treatment of cervical infections.

For the majority of cervical conditions some form of cauterization will prove most helpful, but one must select with considerable care the type of lesion to be dealt with in this way. It must be kept in mind that external treatment is seldom enough. Frequently the endometrium is diseased all the way from the internal to the external os. Under such circumstances only deep cauterization, after careful dilatation, will be of any lasting benefit. For that large group of women presenting conditions too well established to be wiped out by local applications, but not sufficiently serious to call for the Sturmdorf or other operative intervention, the Dickinson cauterizing method offers the most efficient aid. Some gynecologists of wide experience do not favor the idea of repeated slight cauterization, feeling that a single deep application is more logical and generally effective. I am of the opinion that the operator's professional judgment must be the guide. Each case must be individualized. The only general-

ization possible is that, the longer the condition has been present the deeper will the infiltration of the tissues be, and, consequently, so much more drastic will be the measures required for their eradication. Graves, of Boston, not long ago told me that he seldom applies the cautery more than once, depending upon the thoroughness of this single treatment to bring about abatement of the glandular infection.

Dickinson's technic aims to produce an in-rolling of the inflamed lips as scar formation takes place, stricture of the os being thus avoided. This is important in women who can be expected to bear more children. Using a cautery outfit similar to that employed in nose and throat work, a fine platinum tip burns "tiny gutters" about  $\frac{1}{4}$  in. apart. If only small areas are eroded it will be sufficient merely to puncture the affected tissue at frequent intervals. This treatment is repeated at intervals of about 2 weeks. If cystic degeneration of the glands has taken place, the fine cautery will open up the cyst, a tenaculum holding open the canal so that it can penetrate to the very lowest depth reached by the disease. This method has many advantages, and if properly used will save the great majority of women suffering from cervical inflammation the strain and expense of surgical interference. General anesthesia may at times be necessary, but in the average office patient it can usually be dispensed with. It is important to have the canal thoroughly dry before the cautery is applied. Too great heating of the tip is likely to cause bleeding, which interferes with operator and operation alike. Though a description of the method sounds simple enough, as many other things outside the practice of medicine as well as in it, practice is necessary in order to obtain the best results, and it is only by experience that one can learn exactly when and where to apply it.

Because cervical infection is such a common finding, and the presence of a discharge is taken as so much a matter of course by the majority of gynecologic patients, we are often prone to overlook its importance. Anything that interferes with free drainage from the genital canal is of grave consequence, and a disregarded benign lesion may eventually lead to something quite beyond hope of any aid from us. There is impressive evidence that the pathologic cervix may serve as a focus of infection quite as virulent as tonsil, appendix or gall-bladder when similarly invaded by bacteria. The relation of birth trauma and other injuries of the cervix to malignant disease, has been too widely discussed to make it necessary for me to dwell upon it. The routine care of such lesions is tiresome and, apparently, often unprofitable both spiritually and financially. But as a measure of preventive medicine and a step toward the control and eradication of one of the greatest afflictions of womanhood, it immediately assumes dignity and consequence—something quite worthy of our best efforts and highest professional skill.

*Dr. Margaret Sullivan Herbermann:* "Acute Pelvic Lesions." In early and accurate diagnosis of acute pelvic lesions, one must have in mind 2 outstanding thoughts: (a) The conservation of life. (b) The importance of conserving, as much as possible, the function of the pelvic organs. Because of the future comfort and welfare of the patient, avoid unnecessary removal of the pelvic organs, the early artificial menopause, with subsequent suffering and neurosis and the arresting

of the child-bearing functions. These factors have great influence on the patient's future. In cases where surgery is indicated, it is important that an early diagnosis should be made without loss of time because: (a) Hemorrhage may take undue toll. (b) Sepsis may have made such progress as to seriously damage the patient's chance of either life or complete restoration to health.

Acute pelvic conditions should, therefore, be classified into surgical and nonsurgical. Surgical: (1) Septic abortions. (2) Ectopic pregnancy. (3) Tumors having twisted pedicles—either fibromas or ovarian cysts. (4) Accidental perforation of the uterus. Nonsurgical: (1) Septic abortions; no curettage where there is fever or sign of peritonitis. (2) Acute puerperal sepsis. (3) Acute salpingitis.

Development of sepsis requires time between the implantation of septic contamination and the picture of septicemia—the interval depending upon: (1) The invading organism. (2) Resistance of the patient. (3) Site of the septic implantation. Such interval is longer in the pelvis than in the upper abdomen. Gonorrhea is the exciting factor in most cases.

Most seriously infected cases have followed preliminary instrumentation, and infection rarely follows a single invasion of the uterus, but usually follows repeated instrumentation.

Dissemination of infections occurs chiefly through the walls of the uterus and frequently begins at the site of the placental implantation.

Pelvic cellulitis resulting from such infection should, if treated by surgical means, delay operations from 6 months to 2 years. Indications for surgery: (1) Persistent pelvic pain with distension, some rigidity. (2) Functional bleeding. (3) Chronic ovarian abscess. (4) Inflammatory masses which arrest function or menace health. (5) Chronic intestinal obstruction due to pressure of inflammatory processes on intestinal tract.

Pelvic peritonitis associated with acute salpingitis is treated upon expectant lines. Except when a definite abscess forms, which should be drained through the cul-de-sac, salpingitis should be treated conservatively. It usually localizes and the child-bearing function may be preserved. Even if there is doubt about the diagnosis, it is far safer to make an incision and retire without further interference. Mayo says he has seen many cases die when no exploratory has been made, but he has not seen any one die as result of an exploratory operation.

*Dr. James L. Cobham:* "Early Diagnosis of Pelvic Infections." The fact that pelvic malignancies are usually unattended by pain in their early stages places upon the physician a grave responsibility. When symptoms have arisen which justify the classification of cancer, as such, a favorable prognosis may be considered extremely doubtful. On the other hand, the stage of the disease in which treatment is instituted is a prime factor influencing prognosis, as it is well recognized that the average period of extension of malignancy beyond its localized limitations is only from a few weeks to a few months.

The task of the physician is further complicated by the fact that cancer is often superimposed upon a noncancerous condition at some site of chronic irritation or a benign tumor; in fact it may safely be said that the earliest symptoms of cancer are really those of the precancerous condition itself.



In considering malignant disease of the female generative organs, carcinoma of the cervix is, by far, the most frequent type with which we have to deal; this has been ably shown by Ewing in his studies of 8558 cases of malignant tumors in women at Memorial Hospital covering a period of 12 years. He found cervical cancer in 2134 instances, or 24.9% of the entire group, while carcinoma of the body occurred in only 233, or 2.61%, of the entire group. Malignancies at these 2 sites differ widely in etiology and behavior; nor does the age incidence correspond; carcinoma of the cervix is most frequently seen in women who have borne children and are between 40 and 50 years of age, while that of the fundus occurs at the average age of 55 and in those who are single or have had a sterile marriage.

For practical purposes, an accurate diagnosis of the extent of cervical cancer is of prognostic importance and Greenough has set a standard. (1) Where the disease is limited to the cervix—prognosis good; (2) extension to the uterine body or vaginal wall; (3) to the broad ligament; (4) widespread, producing extensive pelvic fixation and involving bladder, rectum, lymph-glands and even remote organs.

The early symptoms of cervical malignancy are so general that the physician, as well as the patient, may be entirely unsuspecting. A suspicious symptom is leukorrhea with intermenstrual bleeding. Do not wait for pain because, as a rule, when this appears the disease is too advanced for cure. The initial vaginal discharge may not differ from ordinary leukorrhea, except in quality. It soon, however, assumes a watery consistency, characteristic of cancer, and should lead to a thorough examination of the patient. At a later stage, the discharge gives evidence of infectious decomposition and is of a foul odor. Small, bluish white, glazed nodules are often seen on the indurated cervix. Another important diagnostic sign is intermenstrual bleeding due to trauma of the eroded cervix in ordinary muscular movement, or during coitus or digital examination. In the advanced stage, the diagnosis is most obvious and needs no mention. Leukorrhea, menorrhagia, metrorrhagia, and the eroded hypertrophied cervix demand a microscopic examination by biopsy. Some men oppose this but the consensus of opinion agrees with Greenough that biopsy is safer than delay. There are several conditions that simulate cancer of the cervix and, among them, are deep-seated Nabothian cysts, chronic cervicitis, tuberculosis, syphilis and sarcoma. Here, again, the importance of biopsy cannot be too strongly emphasized.

Prophylaxis against cervical cancer deserves a word. Since one of the impulses that start cellular activity upon its wild uncontrolled growth is conceded to be some sort of chronic irritation, it is obvious that removal of abnormal friction and repair of conditions, causing mechanical or chemical irritation, cannot be overlooked. In this connection, I mention infected leukorrheal discharge, malposition of the cervix, incomplete drainage from the genital canal and repair of traumatism after child-birth.

In the majority of cases, the symptom pointing to cancer of the body of the uterus is spotting of a pinkish, or crimson hue after the menopause. In addition, a profuse watery discharge is usually present. Before menopause, a symptom may be menorrhagia or metrorrhagia. As in cervical cancer, pain is not evident until the disease is ad-

vanced. As in cervical cancer, too, the final diagnosis can only be made with the microscope. Since the uterus may be completely invested with cancer but retain its normal size, the sense of touch is of little diagnostic value. A warning note may be sounded here that, since corpus cancer exhibits a strong tendency to seed implantation, manipulation, in curettement of the uterus for a biopsy specimen, should be exceedingly gentle so as not to force cancerous material, if present, into the fallopian tubes.

Sarcomas, originating in the cervix or body of the uterus, are fortunately rare, and, when they do occur, the early symptoms are very similar to those of cancer; especially so, the diffuse variety, and the diagnosis can only be made with the microscope and curette; even this may fail if the endometrium is not involved. By the time the disease exhibits its grapelike, polypoid mass from the cervix, or the finger detects the soft, smooth growth on the endometrium of the uniformly enlarged softened uterus, or bimanual examination reveals the hard nodules of fibrosarcoma, the disease is beyond control.

Carcinoma and sarcoma of the ovary, in their early stages, have no distinguishing features, from benign growths except earlier onset of pain. Ewing found carcinoma to have occurred in 1.88% of his entire group and the age period varied from 5 years to 65. Unfortunately, when most of these cases are seen, it is too late, due to the early and extensive metastasis. Any woman presenting herself, complaining of pain, with any alteration in the menstrual cycle, and enlarged, tender adnexa, should be regarded as a possible malignancy.

*Dr. John B. Faison:* "Therapeutics of Pelvic Malignancy". The purpose of this paper is to summarize, as briefly and concisely as possible, the present status of the treatment of pelvic malignancy with particular reference to cancer of the cervix and body of the uterus.

Roughly speaking, 25% of all carcinomas that afflict the female occur in the uterus and, unfortunately, cancer incidence is steadily increasing. Almost all of us are called upon, at some time or other, to face the problem of what to do for a patient with uterine cancer, and at such times our first thought is naturally what will give this woman her best chance for survival. And this is often no easy question to decide for it involves many factors: the nature of the growth; extent of the disease; condition of the patient; and most vexing of all, the procedures to be followed—surgery or radiation, or both. Obviously, all carcinomas of the uterus are not alike in their cellular make-up, nor are they encountered at the same degree of advancement, and since the results to be expected from any form of treatment depend almost entirely upon these variations we must consider them closely before a prognosis can be made. It is now the practice to try to place these neoplasms clinically under 1 of 3 heads, namely, early, border-line, and advance. In carcinoma of the cervix the early group is composed of cases in which the malignancy is localized to the cervix. The border-line cases are those showing slight extension into the tissue about the cervix, with moderate fixation of the cervix but a freely movable uterus. The advanced group comprises those cases in which there is wide extension in all planes with complete or almost complete loss of mobility.

In carcinoma of the body the gradation is an-

alogous except for the added factor of uterine enlargement.

Our next consideration is the histology of the growth. It is a well known fact that cancerous growths of the uterus, even though discovered in an early stage, may show widely different degrees of response to treatment in different individuals. Allowing for the so-called personal factor, why should this be? The answer lies in the cellular make-up, or histology, of the tumor. The lining epithelium of the corpus uteri is columnar celled and malignant growths of the body are almost invariably adenocarcinomas. I am purposely omitting reference to sarcoma and chorio-epithelioma which are exceedingly rare forms and are almost never seen by most of us. These cancers are relatively slow growing and are fairly uniform as to rate of growth. The lining epithelium of the cervix, on the other hand, is almost entirely squamous celled and unlike the body there are widely marked degrees of cell proliferation and malignancy. This fact has been recognized by pathologists for years but it is only recently that its significance with relation to treatment and prognosis has been realized. It is on these histologic variations that Broders, of the Mayo Clinic, and Ewing, of the Memorial Hospital, have based their gradations of squamous cell carcinoma. Dr. Ewing's classification, which is most commonly used in and about New York, recognizes 3 grades based upon the degree of anaplasia of the tumor and by anaplasia is meant, in brief, collularity, variations in shape and size of nuclei, tendency to infiltrate, number and quality of mitotic figures, and absence of adult cell characteristics.

At one extreme there is a small group (about 17% of total) showing tumor cells closely approximating the adult normal cells and with marked squamous tendencies, which he calls Grade I or Adult type. At the other extreme is another slightly larger group (21% of total) where the cells have lost all differential characteristics and show marked powers of proliferation and infiltration; the anaplastic and highly malignant form. In between, is a larger group (approximately 62%) which shows characteristics intermediate between the extremes and which is called the "plexiform type". The great importance of this histologic classification, upon the prognosis and mode of treatment, will, I hope, become apparent as we go on.

Now as to treatment. First, let us consider carcinoma of the corpus uteri. As has been said, it is much less frequent than carcinoma of the cervix; about 1 out of 10 cases of uterine malignancy occur in the body. It grows relatively slowly, spreads first by direct extension to the parametrium and involves the lymphatics later. For these reasons it is usually considered to be, in favorable cases, primarily a subject for surgical attack. My own feeling is that, except in very early cases, it should be treated by combined radium and surgery. Cancer being what it is, it behooves us to give our patients every possible chance for recovery and thorough irradiation of the uterus before operation, with maximal possible tumor destruction and lymphatic blockage, certainly seems to be a safer and more reasonable procedure than surgery alone. The morbidity from treatment is slight and if 2 to 3 weeks are allowed to elapse before operation, the technical difficulties for the surgeon are enhanced very little, if any. Late cases, which are inoperable, leave us no choice. Here, radium and

deep x-ray therapy, as palliative agents, are generally regarded as the only therapeutic means at our disposal. The treatment of carcinoma of the cervix presents quite another problem. Here we have marked variations in tumor histology to consider as well as the degree of extension of the disease. And this is where the pathologist's gradation is of vital importance.

Recent work at the Memorial, in New York, has shown a distinct relationship between the cellular structure of a tumor and its response to radium or surgery. In other words, the more anaplastic or malignant the growth the greater its sensitivity to radium and the more prompt its recurrence following surgery. Conversely, the less anaplastic and the more adult the cell type the greater its resistance to radium and better the results from operation. In other words, the point I am trying to make is this, we must know accurately not only the extent of disease but also the histologic nature of any cancer of the cervix before we can know how to serve the best interests of our patient. And what is best for the patient with this disease? To my mind the answer is definite—complete and thorough irradiation—and the easiest way to prove this contention is by comparing the end-results of surgery and radium.

Dr. Wm. P. Healy, Attending Gynecologist to the Memorial Hospital, has kindly allowed me to use the following statistics taken from his service for comparison with analogous groups reported by the Johns Hopkins Hospital and the Mayo Clinic. These figures represent 200 cases of proved carcinoma of the cervix treated in 1922-23 by radiation as compared with the same number treated surgically.

	Radiation	Surgery		
		Per Cent Cured	J. H. H. Per Cent Cured 5 yrs.	Mayo Clinic Per Cent Cured
Grade I	Operable	50	47	53
	Advanced	4		
Grade II	Operable	43		
	Advanced	14	24	21
Grade III	Operable	66		
	Advanced	42	9 1/2	9 1/2

Analysis of these figures shows that only one group (Grade I) 17% of total cases, is surgery comparable to radium as far as end-results go.

In group II, the advantage of radium is marked; in Group III (the highly malignant type), it is overwhelming. In other words, surgery at best has little to offer except in a relatively small percentage of early and border-line cases of the adult type. And even there, it offers no advantages over radium in end-results and imposes a major surgical procedure and relatively long hospitalization upon the patient besides.

In the highly cellular, malignant group radium at times works almost miracles, with a record of 66% 5-year cures in so-called operable cases and 42% cures in advanced cases as compared with 9 1/2% cures, obtained in early cases only, by the most expert operators.

Therefore, since the histologic gradation of epidermoid tumors has not yet been widely adopted by pathologists over the country, and since surgery even in properly selected cases imposes a greater physical and financial strain upon the patient, than radium, it is my belief that car-



cinoma of the cervix should be a problem for radiation and radiation alone.

As for malignant diseases of other pelvic organs, such as ovary and fallopian tube, suffice it to say now that results with radiation alone are not very satisfactory. Radium and the x-rays have some value as palliative agents but our main hope in these diseases is still early and competent surgery.

By way of summary, we may say that:

(1) Cancer of the corpus uteri in early or border-line cases is best treated by surgery, although pre-operative radiation would seem to be advisable if there is any question as to extent of the disease. In late cases radium is useful for palliation.

(2) Carcinoma of the cervix is preëminently a condition for radiation and the results we may expect from this method of treatment depend in large measure upon (a) the clinical degree of the disease—early border-line or advanced; and (b) adult type and radio resistant, anaplastic type and radiosensitive or intermediate type. These factors, if kept in mind, may make a trifle easier the approach to an unfortunately obscured and complicated question.

*Dr. Frank J. McLoughlin.* "Importance of the Pelvic Fascia in the Repair of Cystocele and Rectocele." Injuries to the birth canal resulting in hernias of the pelvic tract. Fascia is to be used in their repair as it is now being used in the repair of other forms of hernia. Rectocele is due to injury of the rectovesical fascia. There are three layers to be considered. (1) The layers of fascia on the 2 surfaces of the levator ani muscle. (2) The triangular ligament. (3) The rectovaginal fascia.

*Dr. McLoughlin* gave a lantern slide demonstration of the fascial layers and the development of cystocele and technic of repair. This was followed by a similar group of pictures depicting rectocele development and repair. In conclusion he stated, that since rectocele and cystocele are essentially hernias, the available fascia should be used for their correction.

### Bayonne Hospital Clinical Conference

Maurice Shapiro, M.D., Secretary

The regular meeting of the Clinical Conference of Bayonne Hospital was held Monday evening, February 2, at 9 o'clock. In the absence of Dr. Donohoe, Dr. Sexsmith acted as Chairman.

*Dr. Morgenstein* reported for the service of Dr. Weiss. *Case 1.* Cardiovascular syphilis with multiple aneurysms. A. C., aged 68, male, admitted December 17 with swelling of right knee and inability to walk. Three weeks prior to admission knee began to swell tremendously and then could not move knee at all; is mentally dull, very incoherent, and connected history could not be obtained. Denies venereal history. Pupils did not react to light, but did react to accommodation. Low systolic murmur at apex; low diastolic murmur at aortic area. Heart enlarged. In right axilla there was a marked pulsation. Radial and brachial arteries markedly tortuous and pulsating. Corrigan pulse at wrists. Right popliteal artery greatly enlarged, and forming a pulsating mass. Left knee swollen and painful over anterior aspect. Numerous varicosities in both legs.

B. P. 156/62. Wassermann and Kahn tests positive.

While in hospital general condition became gradually worse; developed Cheyne-Stokes' respiration, and expired on January 14.

*Case 2.* Chronic rheumatic endocarditis. Z. P., aged 26, admitted for last time on June 16, complaining of difficulty and shortness of breath, abdominal distention and edema of ankles. Present illness began about 3 yr. ago with swelling of legs, dyspnea on slight exertion, orthopnea, associated with an intermittent non-productive cough. Was sent to hospital at that time and condition improved in a few weeks so that he was discharged. A year later dyspnea and cough returned. Was re-admitted to hospital and after a few weeks improved and was again discharged. Some time later gave history of having been struck in abdomen with a baseball and above symptoms again recurred, and after another stay in the hospital was again discharged as improved. Had several more readmissions with same symptoms until present time.

Heart very much enlarged; loud systolic murmur at apex; fibrillation present. Lungs: moist, crackling râles present at bases posteriorly, with dullness.

Progress very unfavorable; developed marked ascites, severe dyspnea, became very despondent, refused medication and went into a coma for several days. Toward the end, became markedly cyanotic and finally expired on January 25.

*Case 3.* Subacute endocarditis. E. M., aged 20, female, admitted January 10 complaining of soreness of right shoulder and swelling of right leg. Influenza 11 weeks before and had been confined to bed ever since. During this period she had cough, chill, fever and dyspnea. About 2 weeks prior to admission she got up from bed against doctor's orders, and soon began complaining of pain in right ankle and knee joint. Loud systolic murmur at apex transmitted to axilla; also murmur over aortic area, systolic in time. Temperature from subnormal to 105°.

Blood culture showed *Streptococcus viridin*. Given total bed rest, salicylates and supportive treatment. Still alive. Has periods when she feels better but condition is practically unchanged.

*Dr. Sklar*, discussing the prognosis of bacterial endocarditis, stated that text-books all claimed a 100% mortality. However, at a recent conference at the Academy of Medicine, Dr. Emanuel Libman presented several cases of cured subacute bacterial endocarditis.

*Dr. Antapol* then told of the healing and of healed subacute bacterial endocarditis cases which developed glomerulonephritis.

*Dr. Sexsmith* questioned why so many children should have rheumatic heart conditions at an early age, proceed to grow normally without any bad signs in spite of the fact that loud murmurs are heard in the heart, and that at the age of 17 or 18 he finds no evidence of damage to the heart; that in his opinion 90% of these cases get well and show no after symptoms.

*Dr. Antapol* replied that in spite of rheumatic involvement the individual may be compensated and die of some condition other than rheumatic involvement of the heart. There is also pathologic evidence of repeated acute attacks, one superimposed on another. Cases have also been observed in which at death no evidence of rheu-

matism was present, and yet Aschoff bodies were found in the myocardium even though the last clinical attack had been observed 17 years previously.

Dr. Fifer, service of Dr. Sexsmith, presented a case of fracture of the femur with over-riding. F. D. V., male, aged 19, was admitted November 12. Sustained an injury to left thigh in automobile accident. Admitted to hospital immediately after accident. X-ray examination then showed an oblique fracture at the middle of the femur, with a slight amount of over-riding, probably about  $1\frac{1}{2}$  in.; lower fragment displaced inward and backward. A Buck's extension splint was applied. On December 1—19 days after admission—radiograph disclosed the fragments with the same alignment, but the over-riding more marked. On December 5, a spica cast was applied. Three days later, x-ray examination showed the fragments to be in the same position as previously reported; a very slight amount of callus seen; an over-riding of at least 3 in. and the lower fragment displaced inward and backward. Buck's extension apparatus was re-applied with 24 lb. weight.

On December 22, a re-examination of the fractured femur showed the fragments in about the same alignment but the amount of over-riding markedly diminished. The extremity was kept in counter extension until January 20—9 weeks after admission—and as there was still no evidence of union an open reduction was decided upon. Under ether an incision was made at the outer side of the thigh through the skin and superficial fascia, along a line from the anterior superior iliac spine to the outer angle of the patella. The external circumflex vessels and nerve were retracted proximally upward, the vastus intermedius was divided in its upper part, and the shaft of the femur exposed. The ends of the fragments were found to be over-riding approximately  $1\frac{1}{2}$  in., and covered with fibrous tissues. There was no union between the fragments. The line of fracture was at an extremely oblique angle, which made it impossible to bring the fragments together. An attempt was made to sever the irregularity on the distal fragment, by means of a Gigli saw, but without success. Rongeur forceps were then resorted to and the projections of bone on both fragments were pared off. It was then possible, with the aid of counter extension on the foot and leverage under the fragments, to approximate the bones so that the normal anatomic relationships, as in horizontal and right angled planes, were restored. Upon rotating the foot from side to side, the entire femur now rotated with it. The deep muscle fibers, together with the retracted periosteum about the fracture site, were then approximated with interrupted sutures. No drains were inserted. The skin incision was closed with interrupted silk-worm gut. A plaster of paris spica was applied from the pelvis to below the knee, with a window at the site of incision. The patient's immediate postoperative condition was good. On the following day he complained of considerable pain and discomfort in saeral region. A cotton pad was applied. Two days later, patient took it upon himself to cut away cast from pelvis. Radiograph showed fragments in much better alignment, as compared to previous examination, but lower fragment still showed a slight posterior displacement.

The particular point of interest in this case is

the lack of coöperation of the patient and the amount of damage that can be done by a patient of that type.

*The Surgical Service* also brought up a discussion as to the proper time for amputation in traumatic injuries of the legs. The question is one which has been under discussion for a long time. Some authorities claim that the amputation should be done before the patient comes out of his initial shock, while others say wait. Drs. Sexsmith, Pinkerton and Chayse were all of the opinion that the mortality in early amputation is far greater than in later amputation. Dr. Chayse brought out the interesting fact that in the war most amputations were done anywhere from 1 to 3 weeks after the injury and that the death rate was low. However, one must take into consideration the fact that these men were young and in good physical condition. In civilian life, we have to deal with people of all ages and physical disabilities and that there can be no set rule as to when to amputate.

Dr. Eisner reported a case of subcutaneous emphysema of the chest in conjunction with a case of pneumonia on the service of Dr. Williamson. Patient entered January 16. Chief complaints were cough, vomiting, chills and fever. Duration of present illness was 1 day. Began with slight "head cold". The next morning, following a severe vomiting and coughing spell, tissues around the neck and upper thorax began to swell. There were 2 soft cushion-like swellings of the upper thorax and swelling involving the subcutaneous tissue of almost the entire neck, face and scalp, and downward the chest wall, abdomen and even thighs. It was impossible to auscultate because of the crackling of air in the tissues.

Dr. Pinkerton reported a case of papilloma of the vagina in a woman 29 years of age. There was a cauliflower mass filling the vaginal entrance which appeared to be on the right labia extending above the clitoris. This mass had the appearance, grossly, of a malignancy. Wassermann was negative. Biopsy was negative as to malignancy but suggestive of lues. The mass was removed and a broad fibrous base attached to the labia was found. The base and mass were cut away and the stump coagulated by surgical diathermy.

## MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Medical Society met in the Carteret Club on February 11, President Swern in the chair. The usual order of business was suspended, and the program taken up at once.

"Diagnosis and Treatment of Non-Tuberculous Diseases of the Lungs" was discussed by 4 eminent men from Philadelphia. Dr. Elmer H. Funk defined in a most entertaining manner the clinical symptoms. Dr. John T. Farrell, Jr., described in detail the value of roentgenologic study. Dr. Louis H. Clerf emphasized the importance of bronchoscopy with lipiodol instillations. Dr. George Willauer, speaking upon the surgical aspect, outlined in a general way the several heroic measures employed.

The speakers confined their discussions to 3



conditions most frequently diagnosed; abscess bronchiectasis, and new growth.

The applications of Drs. Harry J. Majeski and Anthony J. Lettiere were read and referred to committee. Drs. Vartan Kachdorian and Joseph Ragany were elected to Associate Membership.

Dr. Little reported that the Post-Graduate Course will consist of 3 subjects: Operative Gynecology; Newer Therapy; and Pediatrics.

A report of the Committee on Public Relations, relative to printed forms, explaining the value of toxin-antitoxin to accompany birth certificates, was read and the recommendations endorsed and the committee authorized to confer with Health Officer Alton S. Fell.

Dr. D. L. Haggerty gave a very interesting account of recent legislative action, urging on every member the necessity of attendance upon hearings that may be called.

Expressions of regret concerning the present illness of Dr. C. J. Craythorn were attended by a motion that a remembrance in the form of a basket of flowers be delivered to him.

### MONMOUTH COUNTY

W. Von Oehsen, M.D., Reporter

The monthly meeting of the Monmouth County Medical Society was held at the Red Bank Yacht Club, Wednesday evening, January 28, with Dr. William K. Campbell presiding. Minutes of the previous meeting were read and approved. Communications were read and ordered filed. A letter was read from the First Aid and Safety Squad of the Belmar Fire Department in which it was requested that the doctors cooperate with the squad by giving them a special memorandum, or order, to prevent delay at hospitals. On motion of O. R. Holters, seconded by H. B. Slocum, the matter was referred to the Committee on Public Relations.

J. C. Clayton reported, as a member of the State Society Welfare Committee, the opposition to passing the so-called Jones-Cooper Bill. On motion of Dr. Clayton, seconded by W. G. Herrman, it was carried that the Secretary write to Congressman H. G. Hoffman and advise him of our opposition to this bill, which is a revival of the old Sheppard-Towner law.

On motion of Dr. Clayton, seconded by Dr. Warner, the Minimum Fee Schedule of the County Society is to be enclosed to all new members at the time of notification of election to membership. It was also moved and carried that a Code of Ethics be incorporated in the new Constitution and By-Laws. On motion of Dr. Slocum, seconded by Dr. Clayton, it was carried that when the new Constitution and By-Laws are accepted all present members and all new members be required to sign same.

Drs. J. Nelson Douglas, of Manasquan, Emerson S. Haines, Asbury Park, and Benjamin S. Levine, Asbury Park, were elected to membership. The applications of Drs. Morris Woronoff, Frank Niemtzw, George G. Reynolds and William Matthews were read and referred to the Board of Censors.

Dr. George N. J. Sommer, President of the State Medical Society, spoke on the revival of the Woman's Auxiliary.

The paper of the evening was given by Dr. David Warren Kremer, on "Circulatory Disturbances of the Extremities in Diabetes".

A buffet lunch was served.

### PASSAIC COUNTY

Wayne W. Hall, M.D., Reporter

The regular meeting of the Passaic County Medical Society was held at the Health Center, Paterson, February 12. The minutes of the January meeting were read and approved.

The scientific program consisted of a paper on the "Treatment of Bright's Disease", by Dr. Rolfe Floyd, Attending Physician, Roosevelt Hospital, New York. This paper stimulated considerable discussion and the speaker was requested to send it to the Journal for publication.

The following doctors were elected to membership: Fritz Plinke, 99 Gregory Avenue, Passaic; Nicholas Palma, Broadway, Paterson; George W. Surgent, Clifton, N. J., by transfer from the Albermarle County, Virginia, Medical Society.

The following applications for membership were received: James Marshall Allen, 67 Main Avenue, Passaic; Albert S. Irving, Radburn; and M. Joelson, 122 Paterson Street, Paterson.

Dr. Carlisle announced the schedule of lectures to be given each Friday at 8:30 p. m., beginning in April. There will be 4 lectures devoted to gastro-intestinal surgery and 4 to medical gastroenterology. The fee for this course is \$30.

### SALEM COUNTY

William H. James, M.D., Reporter

The Salem County Medical Society met at the Memorial Hospital, Wednesday, February 11, at 2 p. m. The meeting was not very largely attended owing to the epidemic of La Grippe and various other winter diseases.

President Frank Perry, of Woodstown, called the meeting to order and we had as our guest speaker Dr. Frederick J. Kalteyer, Associate Professor of Medicine at Jefferson Medical College.

Dr. Kalteyer gave a most interesting lecture on Constitution and Colitis, illustrated by moving pictures from the Mayo Clinics.

Among other things, Dr. Kalteyer said that frequent purgation that produces watery stools is very dangerous. The essential remedies were rest and diet. Chronic constipation in time will produce anemia, skin eruptions and dizziness.

The paper was freely discussed and a great deal of practical knowledge was obtained.

At the close of the meeting the usual dinner was enjoyed at the Johnson Hotel.

### SOMERSET COUNTY

J. L. Young, M.D., Reporter

The Somerset County Medical Society held its meeting in the Nurses' Home of the Somerset Hospital on February 12, Dr. E. G. Brittain presiding.

The following applications for membership in the Society were read: Drs. Louis D. Hind, S. H. Husted, Alfred Sferra, Berner Wallock, and George E. Barbour. These applicants were voted upon and made regular members.

Letter read from Dr. Carrins asking to be allowed to withdraw his application since he was not going to locate in New Jersey; withdrawal was granted.

Communication from Dr. Lathan asking that the society investigate telephone company's listing names in telephone directory as doctors. Mo-

tion made and carried that secretary investigate this matter and answer as he saw fit.

The president appointed Drs. Ely, Halstead, and Lawton as members of Good and Welfare Committee.

There was an open discussion as to the rights of insurance companies to regulate medical fees in compensation cases; following this there was appointed a committee of 3 to formulate a resolution condemning this practice of insurance companies.

### SUSSEX COUNTY

F. H. Morrison, M.D., Reporter

The bimonthly meeting of the Sussex County Medical Society was held January 29 at the home of Dr. F. P. Wilbur, in Franklin. There was a large attendance of county physicians and a most enjoyable evening was shared by all present.

The guest speaker of the evening was Dr. Spencer T. Snedecor, of Hackensack, who spoke on "Medical Economics".

Dr. J. Bennett Morrison, Secretary of the New Jersey State Medical Society, and Dr. Henry O. Reik, Editor of the New Jersey State Medical Society Journal, were also present and made brief addresses.

Following the official session, the doctors and their wives enjoyed a buffet supper which was served by Mrs. Wilbur and Mrs. Drake, acting as hostesses.

## Obituaries

BLAKE, Duncan Williamson, of 212 Third st., Gloucester City, New Jersey, who was born of Amos R. and Elizabeth F. Blake, March 7, 1844, in Philadelphia, died at the age of 87.

He was married and had five children.

Dr. Blake attended Terall's Academy, Chester County, Pennsylvania, and graduated from Jefferson Medical College. He reported for military duty during the civil war and was present at the surrender of General Lee to General Grant at Appomattox Court House. He was also Pension Examining Surgeon, at Camden; member of Chosen Freeholders of Camden County; and member of Board of Education and School Physician, Gloucester City. He was especially interested in education.

Resolutions on the death of Dr. Duncan W. Blake, Sr., adopted at a special meeting of the Camden County Medical Society:

Whereas it has pleased Almighty Providence to remove by death from our professional circle, Dr. Duncan W. Blake, Sr., an honorary member of this Society;

Be it Resolved, That we hereby give expression of our sorrow at his departure; and to do honor to his memory.

Dr. Blake was active in the professional and also the political affairs of this county; and he truly represented that fast disappearing type—"The Old Family Doctor."

As a general practitioner of medicine, he was recognized by his confreres as a very able member of the profession and he was beloved by a very large clientele, whom he served so faithfully for a long period of years.

H. F. PALM, M.D.

J. F. LEAVITT, M.D.

W. H. PRATT, M.D.

KITCHEN J. M. W., of East Orange, died February 3, at the age of 84.

Born in Newark, Dr. Kitchen was educated at Newark Academy and Pennsylvania State College, where he received the degree of M. S. Choosing a medical career, he entered the College of Physicians and Surgeons of Columbia University, graduating as an M.D. in 1882. He practiced in New York 18 years before removing to East Orange.

Dr. Kitchen was widely known some years ago as a crusader for pure milk and inventor of devices for saving fuel and heat. The pride of Dr. Kitchen's long list of inventions was a sanitary milk container devised after much experimentation on a farm he had in New Hampshire. He also conducted experiments there on cattle breeding and crop production.

Going to East Orange at the turn of the century after practicing medicine in New York, Dr. Kitchen took special interest in the pure milk problem and became a leader in raising the standard of milk, especially that for infant feeding. He was keenly interested in civic affairs and wrote extensively about them. He founded a dairy company in East Orange that produced milk under what were called the Robinswood Farm methods. His container was designed to protect milk in bottles from infection.

His other devices pertained to production of heat, light and power. Dr. Kitchen once was a familiar figure at the Patent Office in Washington. While there he made a study of the activities in the Department of Agriculture and assisted officials in investigating milk and butter infections. The physician had a large collection of his inventions on his estate, which was one of the largest in East Orange. He made a hobby of flower cultivation and had large greenhouses on his property, which ran from Prospect Street to the west side of the enclosure at Ashland Stadium.

DeGROFFT, Eugene E., died January 5, 1931, at his home in Woodstown, aged 80 years.

Dr. DeGrofft was born in Smyrna, Delaware, October 3, 1850. His parents moved to Auburn, N. J., in 1859, where he attended public school until 1863, when he enlisted as a drummer boy in one of the Maryland regiments. He was a school teacher from 1867 to 1869, and then studied pharmacy in the drug store of Dr. Johnson, at Pennsgrove. He was graduated from the Jefferson Medical College in 1875. He practiced medicine at Mullica Hill from 1875 until 1892, and then moved to Camden, where he practiced until 1900, and to Woodstown, where he practiced until recently.

The death of Dr. DeGrofft removes from us a man of high professional standards—esteemed professionally and beloved socially. He was spared the disability which overtakes many men before they reach the age which he attained, for he was able to pursue his work until a few weeks before his death.

Dr. DeGrofft was an active member of the Salem County Medical Society and had contributed several valuable papers to the society.

He was a member of the Medical Society of New Jersey, the American Medical Association and the Philadelphia Club, and served as Physician to the County Home near Woodstown.

He leaves a widow and 2 sons by a former marriage. Dr. Vernon C. DeGrofft, of Swedesboro, and William C. DeGrofft, cashier of the Woodstown National Bank and Trust Company.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 4

ORANGE, N. J., APRIL, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## A DOCTOR'S CONFESSION OF FAITH— I SPEAK OF THE CHILDREN OF HIPPOCRATES, OF THE CULT OF AESCULAPIUS\*

WELLS P. EAGLETON, M.D.,  
Newark, N. J.

One day in the middle of the last century, a sensitive young Englishman, a recent graduate, after a few months in English mercantile life, depressed by its narrowness, suddenly determined to visit America. Landing on a beautiful Sunday morning he walked up Broadway. Suddenly he stopped and joyously exclaimed to himself: "This is the country for me; there are no poor." Later, to his only child he often said: "Wells, don't make the mistake that I did; don't enter business; don't be a white collar drudge. Have your craft in your hands or your profession in your head; be a painter; be a lawyer; be a parson; but best of all, be a doctor for you will acquire medical traditions—and if you are true to them, its practice will satisfy the cravings of your soul. For the thought of all trade—be he clerk, or financier—is profit for self; while the ethic of the true physician is achievement that chiefly benefits another, even all humanity. The merchant at most can but make a fortune, which is ephemeral, but the physician can make a name which may endure."

And in time that Englishman and his wife

were on-lookers as that boy with his class, stood, while the Oath of Hippocrates was read to them in Greek; not one word of which did that boy understand, although the English curriculum had compelled the father to be a "Grecian".

One day the god Apollo, son of Zeus, the mighty ruler of the world—Apollo, the perfection of manly form—Apollo, who possessed the intelligence of Zeus, his father, and the agility of Mercury, his brother, had a son, Aesculapius, who turned his thought to the curing of the bodies of men. "For", said Aesculapius: "Does not my grandsire Zeus care for the intelligence, and my father Apollo, look to their comeliness and strength, and so, I, Aesculapius, will cure their ills." And the power of Aesculapius so increased that at last he raised the dead; which did not meet with the approval of Zeus, because Zeus being a conservative, thought "if this offspring of mine can make people live forever, some day some one may think he can rule the world as well as I"; and Zeus killed Aesculapius with a thunderbolt. And then, perhaps in contrition, he placed Aesculapius among the constellations; and if we will but fix our minds on the heavens, we can catch gleams from the constellation of Aesculapius, our forbear.

For while Aesculapius lived, he established a fraternity, the Cult of Aesculapius, in which all were brothers who devoted their lives to healing. And not only were the Aesculapians healers, they were priests—for it was a divine calling that has been handed from sire to son, to grandson, to this day; and with their mighty ancestor a constellation among the stars, the

\* (An Address at the 33rd Annual Banquet of the Washington Medical and Surgical Society, Mayflower Hotel, Washington, D. C., May 5, 1930.)

Cult of Aesculapius grew strong and powerful.

The original practice of the cult was largely a temple worship. It had to do with dreams and incantations and suggestions, much after the present mode of psycho-analysis. Its insignia was the serpent, the symbol of wisdom. But the Greeks were a wise people; they soon learned not to take the Aesculapians as seriously as we moderns have<sup>1</sup>. Incantations gradually gave place to the worship of nature; for the Greeks looked life fully in the face—and the beauty of nature, the beauty of the human form, became their religion<sup>2</sup>.

Soon the priests, doubtless perceiving that they were being found out, employed physicians to assist them with their cures and to do their surgery. And one day down in the Peloponnesus, amid the pine trees of Epidauras, surrounded by glorious mountains yet sea washed, Mrs. Eagleton and I scrambled over what was once reputed to be the most beautiful temple in all Greece, the serpentine Temple of Aesculapius; and over that temple was written: "Only pure souls can enter here." And there we saw instruments, curettes and forceps, of which today's are but imitations.

These temple physicians understood many things that we think modern: they understood the necessity of diet, and that nature is the real curative agent in diseases; they recognized the critical days in pneumonia; they practiced cardiac auscultation<sup>3</sup>, I think, for a memorial tablet depicts the Aesculapian, seated, with his head pressed against the left side of the sufferer's chest, apparently listening to his heart, while an attendant stands, his left hand on the patient's pulse with his right arm outstretched apparently keeping time with its beat.

So true were these doctors to the ethos of a profession—a calling—that one day Xerxes coming as a conqueror (and like all conquerors, to murder and to steal), said of the Aesculapians: "What manner of men are these, that contend with one another, not for money, but for honor?"

And one day Hippocrates<sup>4</sup>, of the Cult of Aesculapius, took the real religious ethic, the ideal, that was in the cult, and adapted it to

the workings of life; and thus for all time established a union between the transcendental and the earthly. This he formulated into an oath—The Hippocratic Oath:

"I swear by Apollo the physician, and Aesculapius, and Health, and all the gods and goddesses, that, according to my ability and judgment, I will keep this Oath. To reckon him who taught me this Art, equally dear to me as my parents, to share my substance with him, and to relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and *to teach them this Art, without fee or stipulation*. I will impart a knowledge of the Art to my own sons and to those of my teachers, and to the disciples bound by the oath according to the law of medicine, but to none others. With purity and with holiness I will pass my life and practice my Art<sup>5</sup>."

And one day all the extant works of Hippocrates were collected<sup>6</sup>, but no one knows which of these were written by the Father of Medicine<sup>7, 8</sup>. For medicine did not originate in Greece, but was brought from Egypt, the fount of civilization. Many days before Greece, the Egyptians employed special physicians for different parts of the body; which makes our present day specialists look rather old-fashioned. Among them were many skilled ophthalmologists and dentists, although I had thought that the art of dentistry originated in America<sup>9</sup>.

But the medical profession even then had notoriety hunters—"up to daters"—among them; for a papyrus of 1600 B. C. entitled "How to change an old man into a young man of twenty"<sup>10</sup>, is manifestly the work of a specialist given to exaggeration. Its author can justly claim to be the father of medical publicity. I have no doubt that in his day he was a leader of the medical profession, had a large practice and died very rich; but that, in reality, he was little different from the self-exploiting specialists and surgeons of today, that is, possessed of a good technical knowledge although lacking in real ethical sincerity, as is shown by the fact that the papyrus contains the statement that paralysis on one side of the body is caused by an affection of the opposite cerebral hemisphere; a



physiologic truth that was lost for 3000 years; its anatomic demonstration being furnished by Gall<sup>11</sup> only a little over 100 years ago.

And one day, as we gazed at the Step Pyramid, I was thrilled to learn that its architect, Imhotep<sup>12</sup>, was a physician 2900 years before Christ. When Imhotep died, so great was his reputation, they made him a god and placed him among the stars. So, in the whirligig of time, the title of Father of Medicine has passed from Hippocrates to Imhotep, but the Hippocratic Oath still lives.

The Egyptians believed that after death man's soul is weighed against a feather, the symbol of truth and justice—a quill—so light and ephemeral, and still so powerful and enduring. But the philosophy of Egyptian life taught *what is to be*, not *what is*, and this led to dogma; and formalism gradually froze the mind of man; and medicine passed from Egypt. For medicine is of life, and life lives and expands in myriads of forms; and so long as the mind of man looks frankly at life, medicine grows. Medicine, like life, is *catholic*; it is not *sectarian*.

All countries have made great contributions to medicine, but only at such times as man's thought was free; for all oppressions stop thought, and whenever a restraining hand is placed on the mind of man, be it the hand of King, Priest or rigid formula, creative medicine, the understanding of life, sickens and fades. For despotism, priestcraft, rigid formulas, creeds—all that would control the mind of man—all disguise life, stop an understanding of life. Creeds are but rules of life as *it was*; of forms that have been or that *have become*; but life is not confined by rules; life, as it grows, as it expands, as it evolves, such life creates the rules for life that *Is Becoming*. "What is important in life is life and not a result of life", said Goethe.

Greece, in the height of her thought, sent many out to colonize and some of the greatest pages of Grecian history were written in the colonies. Sicily, even today, furnishes a most fascinating picture of Grecian culture, because its great monuments are still standing; they are not buried; the conqueror, that worshipped marauder, has not passed over the

land and swept all beauty away. In Sicily, is the volcanic mountain, Etna. Its smoking snow-capped summit, 10,000 feet above a tropical land, is one of the most entrancing sights in the world. At its foot, 450 years before Christ, lived Empedocles. He was a physician who did such wondrous things that at last he came to regard himself as a god, at least he made little effort to discredit the assertion. But when we think of what he accomplished it is small wonder. First, he drained marshes to stop the miasma which infested the city<sup>13</sup>. And when we consider that it is only in our day that our own land has thus been released from malaria, and that during 2300 years, his knowledge was neglected, it is not for us to question. In an age in which the gods controlled all the acts of man and of nature, in a land continuously stricken by fevers, to observe that an intermittent type of fever was endemic among those who lived near stagnant water; to conceive that removal of the water would eliminate the disease; to dream such a dream, and then to demonstrate that the dream was true, would try the mental equilibrium of a god.

Empedocles was not only a physician, he was a statesman, an inventor, a philosopher and a poet<sup>14</sup>. All his works were in verse, and, like all the great, he was a dreamer: "For each age is a dream that is dying or one that is coming to birth"<sup>15</sup>. He dreamed and taught the natural selection of species and the sex of plants; he recognized the weight of the air, understood the position of the sun in relation to the earth and the planets; and while he was working miracles of healing, formulating thoughts only fulfilled by Darwin and Newton, he wrote a Constitution for his city which established civil equality. No one knows how Empedocles died, but there is a legend that he threw himself into the crater of Etna to lead men to believe that he had been taken up by the gods; but the mountain refused to be a partner to the sham and expelled one of his sandals. And when I think of Sicily, the island of Penelope, nymph of the flowers, my vision is of the white summit of Etna, and of the aspiring Empedocles, the creative physician, standing there, looking at the

stars, weary after a life of labor for his fellow man, still questioning:

"And you, ye stars,  
Are you, too, what I fear to become?  
You too, once lived;  
But now, ye kindle  
Your lonely, cold-shining lights,  
Unwilling lingerers  
\* \* \* \* \*

Weary like us, though not  
Weary with our weariness"<sup>16</sup>.

Rome came and absorbed Greece with all her learning; and Alexandria became the medical center of the world. And then Celsus tried to systematize medicine<sup>17</sup>; and Galen epitomized the medical art of the classical world<sup>18</sup>.

Galen, being a man as well as a physician, was greatly interested in Cleopatra; and from him we learn that Cleopatra had written 2 books, one on "cosmetics" and the other on "diseases of women"<sup>19</sup> (Whether there was any relation between them Galen does not state). Galen believed that Cleopatra had special recipes for curling and dyeing the hair<sup>20</sup>; so, perhaps the "permanent wave" is not such a modern affectation after all.

In the Second Century something happened to the mind of man; again, it became fixed, held as in a mold; the mighty spirit of man, his god-like gift, passed under theocratic domination. God, the spirit, the truth, life, could not be looked in the face; the world groveled, and with it medicine.

In the thousands of days from Galen to Vesalius, creative medicine slumbered, but to the credit of the heart of man the tradition of unremunerated service was not lost; for in Byzantine times a common vow was "By the Unmercenary Ones"—referring to St. Cosmos and St. Dameron, physicians, who visited the sick without fee.

Thomas Aquinas, the most learned of all the theologians, but with a medical mind filled with faith in the power of the spirit over body, entered the presence of Innocence the Fourth while His Holiness was counting the church money. The Pope, to excuse the accumulation of which Aquinas disapproved, said: "Father, the Church can no longer say, 'silver and gold have I none'," to which Aquinas replied haughtily—"Neither can the church now say to the lame, 'Rise up and walk'".

Then St. Francis came; came in a day full of hatred; full of dogma; and taught that love of humanity, love of all life, was the thing; that loving was living. And one day we stood on the parapet where St. Francis walked and worked, on the hilltop of Assisi overlooking the pastures and vineyards of Umbria canopied by Italian skies, supreme blend of beauty and peace; and here we could understand how such surroundings, and on such a highly sensitive body, could cause the imprint of the Cross being placed upon him<sup>21</sup>; for environment and disease both play a rôle in man's spiritual growth<sup>22</sup>.

The best explanation for the East Indian's pessimism is the universal prevalence of chronic malaria among them. I know that there are moments in the lives of all thoughtful and sincere men in which stimulating surroundings force them to see that the great spiritual power within man actually can talk with God, as Moses did on Sinai. For life and my experience persuade me that no man can increase his height by an inch, his frame is given him by his forbears; no man can enlarge his intellect, he inherits his mind; but each man's spiritual possibilities are limitless, and depend on himself alone; God lends him His hand, but he rises by his own exertions.

Paracelsus<sup>23</sup>, the father of modern internal medicine, then came. Up to his day alchemists had chiefly tried to convert other metals into gold; but it took Paracelsus, the physician, to show them that they were wasting their time; that the object of chemistry was not to create gold that warps man's soul but to make medicines to cure man's body.

Paracelsus traveled all over the world consulting with barbers, artists, physicians, soothsayers and conjurors, listening to their experiences and traditions, observing life, and thus he became a great physician, one of the greatest physicians of all time; and then, his greatness affected him and he became a bombast. But his great crime in the eyes of the medical profession was in burning the Canon of Avicenna, its medical Bible, and in publicly advertising and delivering his lectures in the vernacular<sup>24</sup>; the so-called education of the public (and the exploitation of themselves) by leaders of the medical profession through



"radio talks" had not yet come into vogue, and so he was denounced as a charlatan. But no matter what the middle ages thought of him, no matter how he has been defamed, he revolutionized internal medicine, for Paracelsus did for medicine what Luther did for theology; he freed the mind of men from the shackles of tradition. From the day of Paracelsus, creative medicine again lived and if we consider its course we will perceive that the traditions, the beliefs, the ideals of a people have dictated their contributions to medical progress.

Italy, the fount of esthetic thought, brought forth Leonardo de Vinci<sup>25</sup>, and one day while looking at his St. Jerome we were pleased to recall that Leonardo was not only a great painter, but also a great physiologist, and, above all, he was a great dreamer, for like all students of life, be they painters, philosophers, physiologists, physicians—if they are truly great—they are poets, they are idealists, they are dreamers; they all sing:

"But we, with our dreaming and singing,  
Ceaseless and sorrowless we!  
The glory about us clinging  
To the glorious futures we see;  
Our souls with high music ringing;  
O men! it must ever be,  
That we dwell in our dreaming and singing  
A little apart from ye"<sup>26</sup>.

Leonardo de Vinci lived a court life, but while working and dreaming he observed life; and so he discovered the inverted image of the retina; he discovered the effect of light on the pupil; most remarkable of all, he understood and described the involuntary movements of animals—the function of the sympathetic nervous system<sup>27</sup>—a fundamental truth neglected until Gaskell<sup>28</sup> in our day elucidated it.

In France, the fount of individualism, the home of pure thought, Vesalius<sup>29</sup> came and recreated anatomy, and Ambrose Paré revolutionized surgery<sup>30</sup>. Paré followed common sense, and not tradition; he put ligatures around vessels; he taught that it was possible to turn the child in order to deliver it; and in an early translation of his works is found his observations on the treatment of brain abscess—how he used tubing to drain the abscess and caused the remaining pus to be expelled by instructing the patient to close his nose and mouth and to blow into his cheeks, thus

increasing the intracranial pressure. And this latter device described by Paré in 1536<sup>31</sup>, was only rediscovered and adopted in 1925.

Visiting French hospitals we met Vesalius and Paré, Dupuytren<sup>32</sup> and Menière<sup>33</sup> and Charcot<sup>34</sup> and hosts of other doctors whose names previously meant simply a disease. For the French have a very fine custom. When you "walk the wards of a hospital" you not only meet the usual financial Memorial Tablets, but you read the names of the men who have contributed something to medicine, in the hospital in which the work was done, although the walls of that hospital may have long since ceased to stand. The French use their hospitals to commemorate the advancers of medical thought, so that the doctor as he labors has an inspiration to say: "Some day perhaps I may do something worthy and then the French people will not forget to engrave my name among the Children of Hippocrates of the Cult of Aesculapius."

In time England awakens; England who knows how to make a practical application of scientific truths; who has the power to command without oppression, that has made the Anglo-Saxon the ruling race of the world. Harvey<sup>35</sup> came and physiology was born; Malpighi<sup>36</sup>, and pathology, histology and embryology came into being; Sydenham<sup>37</sup>, the "English Hippocrates", who taught that the way to study disease was not by books but at the bedside of the patient; a great contribution. And if I read the signs of the time aright we must return to the methods of Sydenham, we must examine the patient; we must look at him; we must feel him; we must listen to him; we must clinically, diagnose his disease; and then, and only then, should we read laboratory reports. From the day of Sydenham the medical profession waxed strong and Cuts (the father of Dutch poetry) said of the doctors:

"Hail, hail ingenious folk, success attend your ways;

May fortune send you gold, not merely empty praise."

Then came the American and the French Revolutions, fighting for the rights of man; and in that day we find physicians, men of

culture, became men of public affairs because of the duty that they felt and the patriotism that was in them; and we as doctors are proud that of the 59 signers of the Declaration of Independence, 6 were physicians<sup>38</sup>, who left their homes to make effective that immortal document and the work accomplished; 2 quietly returned to their practices<sup>39</sup>, while 2 became governors<sup>40</sup> of their native states and one its chief justice<sup>41</sup>.

America, the mother of technical efficiency, added her quota, largely in the perfection of technical details, and McDowell<sup>42</sup> and Marion Sims<sup>43</sup> came and passed.

Morton<sup>44</sup> and Simpson<sup>45</sup> annihilated pain. Pasteur<sup>46</sup> and Lister<sup>47</sup> conquered suppuration, and modern aseptic surgery was born.

One day we found ourselves in the surgical amphitheater of Sir Victor Horsley<sup>48</sup>. He was a great big genial man who really felt honored that we had come to see his work. And today I think of his lonely grave in far off Mesopotamia, and how he, one of the most distinguished of surgeons, at 59 years of age insisted on going into unlivable Mesopotamia while his country was at war because he thought he was needed; and of his last words to his wife—"Don't worry about me, I do not matter. I can't live forever. It is the young that matter"<sup>49</sup>. And I feel proud that I belong to his profession.

In America, Halsted<sup>50</sup> came; came in a day when surgery was crude; when "do it quick and get through with it, don't mind the blood, you can't operate without losing blood", was the general surgical doctrine. But Halsted, in his quiet way, said: "Rough handling of tissue is not physiologic, it matters not whether the trauma be from an accident or an operation. The patient suffers chiefly from loss of blood and from suppression of function. The surgeon should handle all tissues delicately, patiently, bloodlessly." Out of these physiologic principles has come the surgery of the central nervous system, the greatest contribution that American surgery has made in our day.

Today, as one travels, one is impressed by the universality of high grade medical practice throughout the world. We landed on an island in the southern Pacific Ocean and found

2 doctors with their wives and a few native nurses, in a hospital made of bamboo, supervising medical care of the inhabitants of 14 islands, the furthestmost 700 miles away, and doing as good surgery as is done anywhere in the world; doing everything from a cataract extraction to an appendectomy.

We found ourselves in India, India the home of metaphysical thought, and in a laboratory manned by Hindus we saw that sensitive plants must have a type of nervous mechanism because plants apparently have cycling "periods of sleep" during which their sensibility is diminished; that certain plants apparently "feel" as they react to injury, and that these reactions are lessened by "putting them under an anesthetic"<sup>51</sup>. All this puts a new construction on life. It suggests that there is no break of continuity in the evolution of the nervous system from the plant to the animal, although no nerve fibers have been anatomically demonstrated. While in India the Anglo-Indian Medical Service took us by the hand and joyously showed us their work, for it is in the by-ways of the world that the fraternal feeling of the Cult of Aesculapius is most manifest.

We peeped in on Australia, a country that looks toward America as at a big brother who has "made good". And here one day a young anatomist<sup>52</sup> said "the stiffness, the spasticity, of the legs of the poor fellows who were shot in the head during the war—the spasticity that prevents them from walking—is due to an over-action of involuntary nerves"; and another new page in surgery of the sympathetic nervous system was written.

We reached sunny Spain. And we could understand how, under that incessant glow, the histopathology of the nervous tissue was elucidated. For the Spanish people live among bright pigments; they think in colors; they play with them; as Goya did. It was through the appreciation of color by artist scientists that the anatomic complexities of nervous tissues were unraveled; and this in a laboratory on the second floor of a house in the poorest of neighborhoods.<sup>53</sup> Creative medicine is a strange nymph. She comes to her devotees at odd moments and in unexpected places; to Koch<sup>54</sup> in the midst of a country practice; to



Pasteur in the fields; to Lister in the operating room; to the Curies<sup>55</sup> in a barn; but surround her with marble walls and large awards and she eludes them all. Details are perfected in laboratories but principles are born in lofts.

Next, Russia, whose philosophy of life is that there is no God; that man is God; that the living of this life to its full—and that for all—is the important thing. Russia, that says only those that work; work with their hands or with their heads—for all—shall reap the harvest. For the Soviet Government says—you work or you starve.

From the simple fact that the ringing of the dinner bell will cause the saliva to flow from a dog's mouth, Russian thought has demonstrated that involuntary reflexes depend upon conditions; that many of the ways of animals that we have regarded as instincts, are acquired; that man himself largely creates his involuntary reflexes as he creates his spiritual nature<sup>56</sup>; a profound contribution to an appreciation of creative life.

What does it all mean? That we as doctors are the inheritors of a great tradition. That by our training; by our insight into life which that training should bring; by the spirit that its traditions should develop; it is possible for us to become (no matter in how small a way) members of a great band. In our own city, did not Coit<sup>57</sup> say babies should have clean, unaltered milk? And from his years of unremunerative toil, the young of all the world are healthier, and only the Milk Trust richer. He was true to the traditions of the Cult of Aesculapius. He gave something big—and it was commercially valuable—without thought of recompense.

It is that band that today, as through all the ages, by infinite labor and joyous self-sacrifice, is revealing life to man and man to himself. If the doctor, when he starts life, but sees the Spirit of the Cult of Aesculapius, its precepts and traditions will mold him and he will become a true child of Hippocrates, for while inheritance is the greatest factor in man's physical and intellectual being, it is his environment and himself that construct his character. I have never met a lawyer who is an idealist; yet he may be an optimist. He deals with the laws made by man. I am sorry

for the doctor who is not an idealist, for I think he is missing the greatest thing that his training and his experience should teach. Every day, all day, in his practice he may see the eternal if he but will.

And does it pay? When I think of how disease has been steadily exterminated, each epidemic promptly controlled and life prolonged for the good and happiness of all—for this is the aim of the medical profession—when I see our judiciary so corrupted, and hampered, our laws so distorted and perverted that government almost seems helpless to protect itself—then I feel that those who follow the *ideal* reap the rewards. How are we going to reach it and to hold it? There is a beautiful story about Clemenceau<sup>58</sup>—and Clemenceau was a doctor. Somebody said: "How do you keep at it, overthrowing government after government, always do you fight for what you believe is for the Republic?" And Clemenceau replied: "When I falter, I think of my father. He, like myself, was a doctor. He believed in a Republic even when the second Empire came and was mighty. And one day, Napoleon the little, sent his soldiers and took him, chained between 2 criminals, simply because he could not see that ideal sacrificed for which his countrymen had fought and died. And when I would falter, I think of my father and I become he"<sup>59</sup>.

A doctor, McCrae, who died in the line of duty in Flanders Fields<sup>60</sup>, wrote:

"In Flanders fields the poppies blow  
Between the crosses, row on row  
\* \* \* \* \*  
To you from falling hands, we throw  
The torch. Be yours to hold it high!  
If ye break faith with us who die,  
We shall not sleep, though poppies grow  
in Flanders fields."

And this same doctor taught his class:

"What I spent, I had;  
What I saved, I lost;  
What I gave, I have."

And at the end of the road, we think of Osler's last saying: "Such good fellowship, all the way"<sup>61</sup>. For the longer I live the firmer is my faith in the idealism of the medical profession as a whole, the rank and file of the family physicians of all lands. The vast majority sing in their hearts "For no one shall work for money and no one shall work for fame,

but each *for the joy of the working*<sup>62</sup>. And doctors all have been true to their oath: "I will impart a knowledge of my art—to the disciples without fee or stipulation." And the average doctor can honestly say: "I have practiced my art in purity and holiness, and its practice has satisfied the cravings of my soul."

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Wolcott, Oliver, 1726-1797. Graduated at Yale in 1747 and studied medicine with his brother Alexander. In 1751 entered politics and from there on apparently did not practice medicine. Raised troops and helped defend New York in 1776. Commissioner of Indian affairs of the Northern Department 1775 and negotiated the treaty of Fort Stanik. In campaign against Burgoyne and in defense of Connecticut.

Rush, Benjamin, M.D., 1745-1813, studied at the College of New Jersey and took his preliminary degree in arts in 1760. Studied medicine for 6 years with Redman in Philadelphia. Took Doctor's degree in medicine in Edinburgh University, 1768. Spent 2 years in medical studies in London and Paris. Twitted because of his studious habits, he wrote "Medicine is my wife; science is my mistress; books are my companions" (Richardson, Disciples of Aesculapius, Vol. 1, page 64). Physician General Military Hospital 1777. Established Philadelphia Dispensary 1786. Helped found Dickinson College, in Carlisle, President of the Amer. Society for the Abolition of Slavery. "The loss of no individual of this country, excepting that of Washington or of Franklin, has been lamented with more universal and pathetic demonstrations of sorrow." (Biography of the Signers to the Declaration of Independence, by John Sanderson, Vol. IV, page 283, Philadelphia 1823-27.)

Thornton, Matthew, 1714-1803. Educated at Worcester, Mass. Studied medicine and commenced practice in Londonderry, New Hampshire. Surgeon to New Hampshire Division of 500 men in expedition against Louisberg in 1745. Colonel of Militia at beginning of Revolution. President of Provincial Convention and Chairman of the Committee of Public Safety. Elected to Continental Congress and permitted to sign the Declaration of Independence in September (?) 1776 (Amer. Cyclopaedia, Vol. XV, page 723.)

Taylor, George, 1716-1781. Received a good education in Ireland and came to America as a "redemptioner." (Goodrich's Lives of the Signers, Philadelphia, 1827.) Was an iron worker and a manufacturer of iron and later a practicing physician in Easton, Pennsylvania. Elected to Continental Congress July 20, 1776. Signed the Declaration of Independence, August 2, 1776. (Amer. Cyclopaedia Vol. XV, page 592.) Monument erected to his memory in Easton in 1847 but place of burial unknown (from old paper presented to Easton Historical Society by W. P. Eagleton.) Letter from Taylor in Broderhead's Book of the Signers pertaining to Fac Simile Letters of the Signers of the

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## TREATMENT OF ACUTE CORONARY THROMBOSIS

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The incidence of coronary thrombosis, while probably no greater today than it has been in previous generations, because of widespread publicity and more frequent recognition, appears to be on a decided increase. Modern methods of intensive propaganda, both in lay and medical publications, have done much to focus attention on cardiovascular disease in general, and coronary disease in the guise of "acute indigestion" in particular. A staggering mortality percentage following even the so-called "mild attacks" of this malady places it high in the statistical tables of the principal causes of death. Its gruesome and deadly selectivity among that group of our citizenry most useful in the average intelligent community is only too well known. Removed at the zenith of his productive ability, the usual victim of this disease is to be found among that middle aged class composed of physicians, lawyers, clergymen, and business executives. Even though death may not supervene, the amazing transformation that renders a previously vigorous and energetic individual into a decrepit and enfeebled old man only serves to swell the roster of those struck down by this most serious cardiovascular accident.

The symptoms of coronary thrombosis in its protean syndrome have been developed to such degrees of diagnostic niceties, by the many contributions made to medical literature within the past few years, that the subject requires but little additional elucidation. In its frank form, the sufferer from coronary thrombosis is readily recognized by the clearly defined series of events which transpire in rapid succession.

Probably the most conspicuous feature of the attack is the immediate prostration of the

individual; how much this initial collapse is due to the prolonged, excruciating, and unabating pain and how much to the abrupt alteration in the hemodynamic factors of the damaged heart muscle may be difficult of true evaluation. Both these factors unquestionably play an important rôle in establishing the general clinical picture of shock. Dyspnea, cyanosis, pulmonary edema and other signs of peripheral circulatory failure add to the gravity of the patient's condition. Pathologic changes observed clinically in the marked fall of systolic pressure, and local manifestations of the necrosing heart muscle suggested by temperature, leukocytosis and pericarditis, later to be followed in many instances by embolic phenomena, serve to complete this variegated symptom complex.

Faced with the problem of treating a patient in the agonizing throes of acute coronary occlusion it is essential to be equipped with a thorough and clear concept of the pathologic processes so rapidly taking place in the crippled heart. Probably in no other acute condition is such knowledge of greater importance for the successful combating of an apparently hopeless condition; in the face of newly acquired knowledge, proper and prompt therapeutic steps guided by recognition of the various phases presented by the disease are not altogether futile.

From a purely clinical point of view, the acute coronary thrombosis syndrome may be divided into 3 readily distinguishable stages: first, the onset with its immediate alarming symptoms of pain, shock and prostration; second, the intermediate stage extending from about the third day of the attack to about the tenth, during which time all signs and symptoms of necrosing heart muscle become evident; and third, the stage of convalescence which is exceedingly slow and protracted, not infrequently lasting many weeks and months. It must be constantly borne in mind, however, that death hovers no closer in one stage than in another and with fatal impartiality selects its victims in any period. Mortality tables gleaned from many observers place the probability of recovery slightly less than 50%; in other words, any patient has almost an even chance of recovery.



With this in mind, therapeutic measures will be successful only insofar as the proper stage of the disease is recognized, for the treatment in one stage may be decidedly contraindicated and, perhaps, even hazardous in another. For this reason, therefore, any consideration of treatment in this disease must be based entirely upon the stage in which the patient is seen.

#### STAGE OF ONSET

When an important blood carrier to the heart muscle is suddenly stopped, that segment of the myocardium nourished by this vessel and its branches is immediately set into a disturbed chemical balance. The initial stage of anoxemia rapidly gives way to a series of profoundly altered electrodynamic and hemodynamic response. If the electrodynamic changes are so intense that the normal cardiac cycle can no longer be maintained, death immediately supervenes. This is especially true when the impoverished segment lies in the walls of the ventricular chambers. During the period of anoxemia the myocardium becomes hyperirritable and in it are born many foci for ectopic beats; when several foci become simultaneously operative, ventricular tachycardia will develop. Depending upon the number and distribution of such ectopic points is the probability of ventricular fibrillation enhanced; the development of this latter condition is usually promptly fatal. When, however, the infarcted area lies in the auricular walls, the pathologic changes which follow are no wise different than those developing in the ventricular areas with the important exception that, whereas ventricular fibrillation is incompatible with life, auricular fibrillation is not an uncommon clinical discovery. When this latter condition occurs the life-saving phenomenon exhibited by the conducting tissues in filtering out most of the stimuli arising in the auricle becomes effective. An adequate circulation can thus be maintained without great difficulty.

Sudden death, therefore, when it occurs during the very onset of the attack, is usually due to the above phenomena; no remedies of any kind can be administered promptly enough, nor with any hope of success in combating its development. As high as 55% of

such individuals are said to die during the initial stage from this cause; for them nothing can be done. In other cases, the infarcted area may not be so large nor lie in such important portions of the myocardium; electrodynamic disturbances, if they occur, may not be sufficiently disturbing to seriously hamper cardiac function. At the same time the involved segment may set the entire heart into a state of irritability still fraught with no little danger. Complex neurogenic arcs are apparently quickly established and help to augment the factors of shock produced by such serious cardiovascular impairment. A profound drop in blood pressure levels usually accompanies the local reaction to the infarcted area. This life-saving mechanism is dependent upon the peculiar balance established between the needs of minimum pressure for an adequate peripheral circulation and the resistant qualities of the damaged heart wall. Where the pressure is maintained at high level, rupture of the weakened musculature may result, while, on the other hand, a too great fall in systolic blood pressure may lead to urinary suppression and peripheral vascular stasis.

With these facts in mind, treatment of the initial stage of acute coronary occlusion should be focussed upon amelioration of those factors leading to the extreme shock and prostration. The element of pain is unquestionably of the greatest importance; the agonizing and crushing character of this pain tends to enhance the danger and likelihood of increased myocardial damage, since agitation of the patient as he restlessly thrashes from side to side will quickly complete the picture of exhaustion. For this there is only one remedy; narcosis, no matter how produced, is to be sought for as expeditiously as possible. While a wide variety of drugs may prove to be useful for this purpose, morphin is, in the last analysis, of the greatest help. Dosage of this drug to be effective, must be large; this is no place for the timid and halting administration of the remedy. We have never given less than  $\frac{1}{2}$  gr. for the initial dose subcutaneously; morphin in this instance is practically useless when given orally. The question is often asked, how much morphin can be given in such cases with safety? The answer seems to be

that morphin can be given in larger doses in acute coronary thrombosis than in any other known disease condition, and the full dosage is only achieved when the patient is rendered free from pain. If this result can be obtained by minimum dosage, no further medication may be necessary in the satisfactory handling of the case; more frequently, however, large and massive doses are required, running as high as several grains in the first 24 hours. We have never seen any untoward results from such large dosage, but we have seen patients who have been insufficiently narcotized because of the timidity of the medical attendant.

From time to time individual cases may be found where the pain factor is so overwhelming that nothing short of general anesthesia is of the slightest value. It has been necessary in 2 of our cases to resort to administration of ether in order to prevent the patient from literally tearing himself apart in frantic attempts to secure respite from the terrific stenocardia. General anesthesia in acute coronary occlusion must, however, be used with the greatest caution, as its contraindications far outweigh the rather dubious results to be expected.

Other drugs of the opium series like codein, pantopon, papaverin, and tincture of opium have also been suggested by many authors; all these drugs may prove to be more or less efficacious in individual cases but the results obtained never approach those secured by morphin itself. Of the hypnotics, luminal, allonal, dial, and the bromides in one form or another, have been suggested in those cases where the pain factor is not especially conspicuous. We have found, however, that even in such cases a small dose of morphin may prove to be more reliable than any of these.

Next in importance is control of the symptoms of shock; little need be said concerning this as it differs in no way from shock and prostration met with in other conditions. Warm blankets and hot water bags should be used liberally to combat the vasomotor collapse associated with the cold, clammy sweating found in this condition. One exception might be made in treatment of the shock

occurring as a result of a coronary accident, and that is in regard to the relation of the head to the rest of the body; when shock occurs as a result of accident or after a surgical operation the patient's head is usually lowered, the belief being that an adequate cerebral circulation must be maintained in this way; in coronary occlusion, however, the head must be kept elevated and, indeed, if the dyspnea accompanying the attack be marked, the patient will himself insist on assuming a more or less upright position.

Ordinarily, no other treatment is required during the initial stages of the attack; the question of stimulation may arise if the peripheral circulation is markedly impaired. Hypodermic administration of adrenalin, strophanthin, either alone or in such combinations as digibaine, digitalis, or caffein sodium benzoate, may be given. Here again, as in the use of morphin, dosage must be controlled by the signs of full physiologic effect. In desperate cases intravenous administration of these substances may be demanded; only under the most unusual circumstances is the intracardiac administration of these substances to be recommended. If cardiac arrest occurs, this latter method of treatment may save an otherwise hopeless individual. It has been our experience that intravenous medication is preferable so long as the heart is beating; when cardiac standstill occurs, intracardiac medication must be resorted to.

A word in regard to the use of digitalis must be made here. Inasmuch as the heart in acute coronary thrombosis is usually regular and the action slow, nothing can be hoped for from this drug, while, on the other hand, owing to increased irritability of the ventricular musculature, heart block and ventricular fibrillation may result. If circulatory failure is present at this time, digitalis may be used, but the indications for its use are rather infrequent.

#### INTERMEDIATE STAGE

Forty-eight hours after onset of the initial attack finds the patient more or less relieved from the terrific pain and recovering from the symptoms of shock and prostration. He will then be concerned with gastro-intestinal com-



plaints, chief of which is a peculiar type of nausea unrelieved even if vomiting occurs. It is strange that although this symptom is one of the most conspicuous features of the entire attack and next to the pain factor is the one most often recalled by the patient, this type of nausea has received but scant attention in literature. Relief of this symptom may cause the medical attendant no little concern, as the ordinary measures for combating such complaints are useless. While there seems to be some question as to the actual origin of this nausea, whether it be local in the stomach, reflex from higher centers, or the result of vascular changes in the mesenteric division of the arterial tree, there can be no question but that it presents an almost insurmountable problem for therapy. Probably no remedy in our experience has been as efficacious as employment of the alcohol-sugar combination originally suggested by Libman; these mixtures, the Volstead Act notwithstanding, may be and frequently are life-saving at this critical stage of the disease. Of these alcohol-sugar mixtures the essential liqueurs like *crème de menthe*, *crème de cacao*, *benedictine*, *cointreau* and others if available, may promptly control this most distressing symptom. Given in 1 oz. doses with cracked ice every hour or two, our results have been almost uniformly favorable. The difficulties encountered in securing these remedies have made it necessary for us to develop synthetic formulas for them. At the Beth David Hospital, for example, synthetic *crème de menthe* and *crème de cacao*, fortified with theobromin sodium salicylate to prevent diversion into unorthodox channels, have been used for the past several years. The official U. S. P. preparations of elixir aromaticum to which has been added an equal volume of grain alcohol is perhaps the most readily obtained synthetic liqueur available to the general practicing physician.

Gastric lavage cannot be too strongly condemned and is mentioned here only to focus attention upon the need for correct diagnosis; as indicated previously, the gastro-intestinal symptomatology of the coronary thrombosis syndrome may so predominate in the clinical picture that erroneous conclusions may be easily drawn and the case treated as an acute

gastro-intestinal upset. Likewise, cathartics and strong purges must be carefully avoided and enemas if given should be only of the blandest type and in restricted volume.

Associated with the nausea may be a painful type of eructation; patients frequently plead for relief from gaseous discomfort and indeed the belching of gas may be followed by prompt amelioration of all symptoms. To the usual remedies for this complaint may be added the cautious administration of carbonated waters.

About this time local manifestations of the cardiac injury will be making themselves evident; there will be a slight rise of temperature, moderate leukocytosis, and perhaps the evidences of pericardial involvement. Ordinarily the area of pericarditis is not sufficiently large to give the patient much discomfort but an ice bag placed over the precordium will do much to relieve heart consciousness. If the signs of circulatory failure with pulmonary edema, engorgement of the liver, ascites and pitting of the lower extremities supervene, digitalization should be proceeded with at once. We wish to take this opportunity of warning against the massive dosage method so popular in other cardiac conditions; the hazards invited by rapid digitalization in coronary thrombosis greatly enhance the probabilities of embolism. Digitalis in combination with caroid or any other proteolytic ferment in doses up to 8 or 10 gr. a day seem to be the most satisfactory. Diuretics of the group like metaphyllin, theobromin calcium salicylate, theominal and others are also useful.

Dyspnea and cyanosis may be difficult to control even when there does not appear to be marked signs of circulatory failure. With a slow and regular pulse and with no discoverable indications of edema the dyspnea and cyanosis may still be very great. If difficulties of breathing approach orthopnea, sedatives may be required. Within recent times oxygen therapy has been used with striking results; administered either by an oxygen tent or by the intranasal catheter route, patients apparently obtained prompt relief, so much so, that they demanded its administration. In extremely severe cases, pure oxygen has even been injected intravenously with a favorable

outcome. Oxygen is, however, a recent addition to therapy and sufficient data are still not easily available for true estimation of its efficacy.

Irregularities of the pulse ordinarily require no specific medication inasmuch as they are merely manifestations of the myocardial reaction to injury sustained by the occluded coronary vessel. Most irregularities are extrasystolic in origin and may be disregarded; when, however, they occur very frequently and tend to produce paroxysmal tachycardia they must receive special attention. Quinidin sulphate has been recommended by Levine for this latter condition; we have also used strophanthin with favorable results.

When the myocardial damage has been so extensive as to cause complete heart block the complications of this type of arrhythmia may lead to the symptoms found in the Stokes-Adams syndrome; periods of unconsciousness lasting from a few seconds up to several minutes may be successfully combated by adrenalin injected hypodermically, and in extreme cases by the intracardiac method.

#### STAGE OF CONVALESCENCE

As the patient approaches the tenth day he may be considered as having escaped the immediate hazards so inherent in the acute phase of this disease. The temperature by this time has probably completely subsided; the leukocyte count, on the other hand, may still remain somewhat increased. Libman has pointed out that the white blood count offers a far more accurate index as to the reparative process in the myocardium than the temperature curve; for this reason he would keep such patients at rest in bed until the count reaches a normal figure, regardless of any other negative symptoms. While this may be a good general rule to be carried out if possible, many patients, more especially those of a hyperactive temperament, may become so restless under the enforced régime of prolonged bed-rest that more harm than good will result. Such individuals may actually develop a second attack of coronary occlusion because of the extreme irritability entailed; it is a well established fact that an uneasy state of mind will often lead to or precipitate a secondary

attack. For this reason, therefore, the medical attendant must invoke his clinical judgment and experience in determining just how long any individual patient should be kept in bed, remembering always that the best interests of the patient are those conducive to complete mental and physical repose. If this can be secured by bed rest the problem is considerably simplified; where, on the other hand, the patient is the type previously described, it may be necessary to get him out of bed and into a comfortable chair as soon as this is compatible with safety.

Medication at this time has probably been reduced to symptomatic needs in those patients who have suffered no serious complications during the first and second stages of the disease. The question may arise as to how long coronary dilatation therapy should be continued? Ordinarily, if the blood pressure levels are still low but the pain factor gone, the special indications for this group of remedies are less apparent than in those cases where the pressure has quickly risen to the former high levels. When the original signs of circulatory failure have subsided, digitalis should be discontinued at once, but to be resorted to from time to time as signs of decompensation make their appearance. Indeed, prolonged observation of coronary patients extending over some years will show an entire gamut of myocardial degenerative changes during which many local signs of the decompensated heart will become evident; pulmonary edema, in chronic or acute forms, circulatory stasis phenomena with engorged and tender liver, general and local edema, all will demand specific and prompt digitalization. Irregularities of the pulse and conduction disturbances not infrequently go hand in hand with the other symptoms of myocardial failure; the electrocardiograph will be of great assistance in distinguishing the types of such disturbances. All of them, in the last analysis, are merely different phases of the same degenerative etiologic background and therapy to be of any value must point toward the establishment of better nutrition of the heart muscle. Where this can be secured by improvement in muscle tone and general contractility of the myocardium, digitalis and its allies are to be utilized in full



physiologic dosage; as the fear of emboli in this stage, in contradistinction to the others, is remote. More often, however, those remedies seeking to establish a better coronary circulation are to be preferred; in our experience, metaphyllin has rendered the most consistently good results. Of the more recent remedies, acecolin, either alone or in combination with dextrose, administered intravenously may be of definite prophylactic value. A series of 6 injections given on alternate days has in a group of 56 cases rendered very laudable results in that of the entire group only 16 had subsequent attacks during a period of 18 months of constant observation.

A word in regard to dextrose alone; in our experience this has been the one substance of undisputed value when given intravenously in the second and third stages of the coronary attack. In spite of the general widespread belief that dextrose should be given in very dilute form, we have found that 50% solutions are readily tolerated by the patient. Our usual dosage has been from 10 to 20 c.c. of this strength repeated every other day. In a series of nearly 1000 injections at the Beth David Hospital there has not been a single untoward result; very rarely patients complain of a peculiar taste immediately following injection of the dextrose, and from time to time others speak of a flushing of the face.

An interesting difficulty in the treatment of coronary thrombosis is encountered in diabetic individuals; Levine has shown that as high as 24% of the patients studied in his series were known to have had diabetes. This figure would suggest that this disease is not an uncommon complication in the coronary syndrome and when discovered the question of insulin administration immediately arises. Friedman was the first to point out that diabetic patients are rendered more susceptible to coronary pain when insulin is given in the attempt to reduce hyperglycemia; in fact, severe coronary attacks are often precipitated. Unless the blood sugar has reached dangerously high levels and acidosis is likely, insulin should not be employed. Dietary measures including even the older, and now unpopular, starvation methods should be tried.

This brings us to the question of diet in

general and we wish to point out here that no hard and fast rules can be laid down in regard to special dietary measures. During the first stage of the disease the problem is exceedingly simple, as the patient will himself refuse all food. Fluids like the citrous fruit juices, thin gruels and albumin waters and some of the fermented milks will comprise the total selection. If the nausea and vomiting factors are prominent, the dangers of dehydration must not be lost sight of; a careful check of the water balance must be one of the essential nursing procedures. Where there is a negative balance and the output considerably diminished, immediate measures must be undertaken to correct this feature. During the second stage of the malady the choice of diet is considerably augmented and is comparable to the average soft diets as used in most hospitals; the exception being the total exclusion of ordinary milk. We cannot too strongly interdict the use of milk diets like that of Carrel so frequently employed during these stages of the disease. In our experience, milk taken by such patients leads to considerable gastric distress and, if anything, adds to the discomforts already present. Unless there is some definite contraindication, a relatively high carbohydrate ratio should be maintained; such substances as honey, molasses, or sugar syrups can be given liberally.

At approach of the third, or convalescent, stage a rather liberal selection may be permitted; with the exception of heavy proteins, the diet need vary in no wise from that of a careful normal diet. We have no special objection to tobacco, tea or coffee, so long as these are kept within moderation and, indeed, we feel that in certain instances they may be especially beneficial. Of great importance to the patient is the problem of physical activity, and such questions as "when can I go back to work", "how far can I walk", "can I play golf or do any gymnastic work", "can I indulge sexually", and many others of similar nature, greet the medical attendant sooner or later in every case of coronary disease.

The answer to this very complicated phase of the disease is one which requires the utmost caution; realizing on the one hand that sudden death may overtake such patients at

any time, and, on the other, that a certain amount of exercise is therapeutically indicated, it may be a question of fine discernment to determine how much or how little the patient may be permitted to do. Here again, no general rule can be made elastic enough to cover all cases and it will be necessary to take into consideration not only the patient's previous habits but also the extent of damage suffered during his first or subsequent attacks. Probably in no other instance in clinical medicine will good judgment and experience stand the doctor in better stead in determining the future conduct of individuals. Gradually increasing the amount of physical exercise until the patient's daily routine has been reestablished to a point to render his forced seclusion less irksome, but conducive to safety, is the ideal goal to be sought.

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## THE CLINICAL SIGNIFICANCE OF HIGH AND LOW BLOOD PRESSURE\*

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I have selected this particular topic because a study of the large array of papers on blood pressure published each year proves that their authors are frequently quite ignorant of the fundamental laws of pressure. An error repeatedly made is to consider blood pressure as an entity, while in reality it is the result of the interaction of several factors. Thus, it is stated in "Classification and Diagnosis of Heart Disease", by Bainton, Levy, Munty and Pardee, that: "Essential hypertension is a disorder in which the arterial pressure is permanently increased without cause. It is a disturbance in function rather than in structure. In the early stages of it there may be no signs other than the increased arterial pressure, while later on there may be an enlargement of the heart. When other cardiac signs and symptoms appear, it is probable that arteriosclerosis of the aorta or coronary arteries has developed. For the purpose of this classi-

fication the term of hypertension as an etiologic diagnosis should be restricted to cases without demonstrable arteriosclerosis. When the latter is present, the etiologic diagnosis should be entered as arteriosclerosis, the hypertension being then a physiologic diagnosis."

Questionable statements of this and similar kind appearing in print from time to time do not render this subject more comprehensive but tend to dim the issue. The classification offered by these authors cannot be accepted, because it is not built upon a solid physiologic basis. Just as surely as blood pressure is a product derived from the interaction of a number of physiologic processes, so may every increase or decrease in pressure be traced to one or several of its causative factors. Keeping this in mind, it will be seen that such terms as "essential hypertension" must be used with care. Essential means indispensable and necessary. In a medical sense it refers to something idiopathic and independent of others. Blood pressure is a normal physiologic function. It is not idiopathic. Consequently, any abnormal state, such as hypertension or hypotension, must be the result of an abnormal interaction of its causative factors. Hypertension is no more essential or idiopathic than pneumonia or any other pathologic condition.

The principal factors responsible for blood pressure are: (a) the energy of the heart; (b) quantity of the circulating blood; (c) elasticity of the vessels; (d) the peripheral resistance. Each ventricular systole forces about 60 c.c. blood into the aorta. Assuming that the other 3 factors remain constant, the pressure must rise whenever the energy of the heart is increased and fall whenever it is decreased. The ventricular output is proportional to the cardiac energy and is based upon the following secondary factors: the volume of each discharge, the frequency with which these discharges are repeated, and the force with which they are effected. The first is determined by the capacity of the cardiac chambers, or their power of filling; the second concerns the cardiac output per unit of time in that the aorta usually receives about

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\*(Read before the Bergen County Medical Society, September 9, 1930.)



4 liters of blood in the course of 1 minute; the third pertains to the force of ejection.

The total quantity of the blood is calculated at  $1/20$  to  $1/13$ —average  $1/17$ —of the body weight. It does not vary much. Marked variations occur during hemorrhage or during infusion. Provided the other 3 factors remain constant, any addition to the amount of the circulatory blood must lead to an increase in blood pressure, and vice versa.

The elasticity of the vascular system presents itself as an alternate distention and elastic recoil of the vessel wall, and is due very largely to the connective tissue framework. The aorta is not equipped with muscle cells and merely serves the purpose of an elastic reservoir, the recoil of which is largely responsible for onward movement of the blood during the resting period of the heart. When the elastic property of the vessels is diminished by infiltrations, the pressure must rise; contrariwise, any unusual relaxation of these vessels must lower the pressure.

The principal factor concerned in forming the peripheral resistance is the size of the arteriocapillary outlet. The arterioles are heavily beset with smooth muscle tissue which on account of its contractile power is able to diminish, sphincter-like, the outlet into the capillary system. This part of the vascular system serves the purpose of a gate which may be closed or widely opened. If it is closed, the arterial blood is hindered in its escape into the capillaries and the arterial pressure rises; if it is opened, more copious escape of the arterial blood diminishes the arterial pressure.

It is a simple matter to analyze changes in blood pressure when only 1 of the 4 factors mentioned is affected. As a rule, however, the changes produced by one are modified by those produced by a second or even a third factor. Thus, it frequently happens that an increase in energy of the heart, which ordinarily would result in a rise in blood pressure, is compensated for by a lessening of the peripheral resistance. The reverse is also true. It is a well known fact that a vasoconstriction which would otherwise lead to a higher blood pressure, is often offset by a lessened fre-

quency of the heart and ventricular discharge. A loss in the total quantity of the blood which should reduce the pressure, is often compensated for by vasoconstriction, i.e., by an increased peripheral resistance. Examples which could be mentioned to illustrate this interaction are in reality too numerous to include in this brief discussion.

What is true of these normal interactions is also true of the abnormal ones. Let us look for a moment at an outline of the more common types of hypotension and hypertension:

*Hypotensions.* Functional: Chronic valvular diseases of the heart; irregularities in its beat; hemorrhage; vascular relaxation as in neurasthenia; and shock. Organic: Loss of constrictor substance, as after destruction of adrenal bodies.

*Hypertensions.* Functional: Diet, excessive weight, obesity; habits of life and physical efforts; menopause; hyperthyroidism; chronic valvular diseases of the heart. Organic: Arteriosclerosis, local and general; diseases of the kidneys.

It is now a simple matter to analyze any of these conditions in accordance with the outline given above. Let us take, for example, the hypotension of nervous debility and exhaustion. The chief factor is lessening of the peripheral resistance by vasorelaxation. The fall in blood pressure is reflexly compensated for by an increase in energy of the heart. The frequency of contraction is increased in order to augment the ventricular output, thereby endeavoring to retain an efficient pressure.

Quite similarly, we may select samples of hypertension which may be arranged causatively in accordance with the preceding table. Mitral stenosis is usually associated with a hypertension. A young person, exhibiting a pressure of 140 to 150 mm. Hg., may be suspected immediately of being afflicted with an obstruction at this orifice. Nature endeavors to counteract this hindrance to the ventricular output by increasing the energy of the heart. This organ beats more frequently and increases its force of ejection. The early dilata-

tion of the left auricle is superseded by an hypertrophy of its wall. In its endeavor to propel the required amount of blood the heart slightly overdoes it, and the result is an arterial pressure somewhat above normal.

Local and general sclerotic changes of the vessels invariably lead to a hypertension, which increase in pressure can make itself felt only after the compensation resident in a reduction of the cardiac energy has failed. Thus, the high pressures (180 mm. Hg.) usually present in people of about 70 years of age have their cause, as a rule, in a general arteriosclerosis which has passed beyond the aid of cardiac energy. Never try to lower this pressure, because a perfectly serviceable hypertension may then be changed into a terminal hypotension either by a loss of the cardiac energy (heart failure) or an excessive reduction in the resistance.

The hypertension of a hyperthyroidism finds its origin in an increase in the peripheral resistance. The latter is due to a spastic setting of the vessels in consequence of thyroid toxin. Later on, the initial hypertension may give way to a hypotension provided the heart has been affected sufficiently to cause an irregularity in its beat and atonia of its muscle tissue. The hypertension of the menopause has a similar cause.

The hypertension of obesity may be traced to an increased peripheral resistance and cardiac energy brought about by the fact that the extra capillary expanse has overloaded the circulatory system. Additional pressure is required to provide an efficient circulation.

These few examples, I hope, will prove my contention that the abnormal blood pressures have as definite a cause as the normal ones. Thus, if we restrict ourselves to solid basic principles, such conflicting terms as *essential* need not be employed at all. They only serve to complicate matters. Analyzed in the above manner, any type of blood pressure, whether high or low, normal or abnormal, must assume a more plastic and simple aspect.

## PRACTICAL MANAGEMENT OF DIABETES\*

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Management of the diabetic patient resolves itself into a consideration of 2 distinct manifestations of the disease—acute and chronic diabetes.

### ACUTE DIABETES WITH COMA

The classic signal of the acute diabetic is coma, resulting from one of the following causes: (1) dietetic irregularities; (2) sudden withdrawal of insulin; (3) infections; (4) acute surgical conditions, such as appendicitis, cholecystitis, or carbuncle.

The symptoms associated with diabetic coma are: (1) nausea and vomiting; (2) abdominal pain; (3) rapid, shallow respiration, or air hunger; (4) subnormal temperature, unless complicated by infection; (5) soft eyeballs (almost pathognomonic); (6) acetone breath; (7) albumin and casts in the urine; (8) anuria, as contrasted with polyuria of the pre-comatose state; (9) sugar and acetone bodies in the urine; (10) high blood sugar, low plasma  $\text{CO}_2$ , nitrogen retention, urea nitrogen 50 mg. per 100 c.c.; (11) coma.

Whether the condition be an uncomplicated coma due to overindulgence in food, or one brought on by infection, or one complicating an acute surgical condition, the treatment is the same. The condition should be regarded as an emergency and, if possible, the patient taken immediately to a hospital.

A known diabetic who is the victim of an infection or who develops a fever from any cause should be regarded as in impending coma, and should be treated vigorously from the start to forestall the threatened onset of acidosis.

The patient should of course be put to bed, with a nurse in constant attendance. If conscious, hot tea, coffee, broth, orange juice, or water should be given every hour in 6 oz.

\* (Address delivered before the Passaic County Medical Society, September 11, 1930.)



amounts; he should be kept warm; a complete enema followed by a retention enema of 1 pint normal saline; if there is evidence of gastric distension, lavage should be done.

If the patient is actually in coma, hot coffee or normal saline (6 oz.) should be given by rectum every 3 hr. and supplemented by hypodermoclyses of 1000 c.c. physiologic saline every 6 hours. With suppression of urine, an infusion of 1000 c.c. saline twice daily is the best possible diuretic. Caffein sodium benzoate gr.  $7\frac{1}{2}$ , should be given subcutaneously every 2 hours. If the pulse is rapid and of poor quality, digifolin should be given intravenously, gr.  $1\frac{1}{2}$ , every 4 hours till an effect is noted.

All the above measures are directed toward correcting 3 conditions that invariably accompany a coma of diabetic origin, namely: (1) extreme desiccation of the body tissues; (2) circulatory collapse; (3) urinary suppression.

To overcome the high blood sugar and eliminate acetone bodies from the blood, insulin is the remedy par excellence. If the blood sugar, on admission, is over 500 mg. per 100 c.c. and the  $\text{CO}_2$  is below 25 volumes per cent., give 40 units of insulin intravenously at once, to be followed by 20 units subcutaneously. Repeat the 20 units subcutaneously every  $\frac{1}{2}$  hr. until the urine sugar is reduced to a faint trace and the blood sugar is below 200 mg. At first the blood should be examined at hourly intervals for sugar, urea and  $\text{CO}_2$ . A catheter should be inserted and kept in place, and the urine tested every  $\frac{1}{2}$  hr. for sugar, acetone and diacetic acid.

In from 2-6 hr., with this intensive treatment, the acidosis should be under control. During this time no glucose is required either by mouth, rectum or intravenously; the patient already has too much glucose in his blood and his tissues are saturated with it. At St. Luke's we have abandoned giving glucose to patients in the early intensive treatment of acidosis. Formerly, when it *was* given, the second and third blood sugar determinations were frequently higher than the first, and recovery was only delayed. What the patient needs at this stage is plenty of fluid to overcome desiccation of the tissues and promote

elimination, and adequate amounts of insulin to neutralize the acidosis. The reason glucose was formerly given was, of course, the fear that not enough glucose existed in the body to oxidize the excessive fatty acids circulating in the blood. When successive blood sugar determinations showed, however, that even with insulin additional glucose only increased the blood sugar, this practice was discontinued. With hourly or even two-hourly blood sugar determinations and half-hourly urinalyses there is no danger of insulin reactions. There is usually more than enough sugar already in the tissues to remove the excess fatty acids *provided* insulin is given in adequate amounts. We now accomplish in a shorter time, with smaller doses of insulin given more frequently, without glucose, what formerly we accomplished over a longer period of time with larger doses of insulin and additional glucose. The patient needs in the first 24 hr. of treatment 50 to 100 gm. of glucose, but this is begun only after the body fluids have been restored and the blood sugar has fallen to at least below 200 mg. per 100 c.c. By that time the patient is probably conscious, and fluids can be taken by mouth. As soon as the urine becomes sugar-free, give 4 oz. orange juice by mouth at once. The patient can now be regarded as out of coma.

#### ACUTE DIABETES WITHOUT COMA

At St. Luke's we have a definite routine for patients who have traveled thus far on the road to recovery. I have devised what is known among the members on the staff as the B and O diet: buttermilk and orange juice alternating in 6 oz. amounts every 2 hr. for 16 of the 24 hr., making a total of 4 glasses of each in 24 hr.; it is not given during the night. This diet is supplemented by water, tea, coffee or broth, so that the patient receives a glass of fluid every hour. This diet contains C 122, P 21, F 7 gm., and amounts to 641 calories. Being relatively high in C and low in F, it is an ideal diet for combating acidosis. If the patient dislikes buttermilk, skimmed milk is given instead.

At this stage the blood is examined once daily for sugar, urea, and  $\text{CO}_2$ . If acetone disappears from the urine, but the blood  $\text{CO}_2$

remains low, it is probably due to some unidentified organic acid. In this case the  $\text{CO}_2$  will return to normal if soda bicarbonate is given in small amounts; 30 gr. t. i. d.

The urine is examined with Benedict's qualitative solution every 3 hr., and insulin given according to what is called the color formula:

If the test is orange, 15 units of insulin.  
 If the test is yellow, 10 units of insulin.  
 If the test is green, 5 units of insulin.  
 If the test is blue, 4 oz. of orange juice.

This is absolutely a fool-proof formula, and can be followed literally without danger to the patient. I first saw it in use on Dr. Joslin's service at the New England Deaconess Hospital, in Boston. It now has the status of a ward order at St. Luke's Hospital, and works perfectly.

If the patient is obese, he is kept on this reducing diet—with the necessary insulin—for several days or even a week or more while he is in bed. The urine is then tested 4 times daily—before breakfast and 1 hr. after meals—and insulin is given before meals in the usual way. A blood chemistry is done twice weekly while in the hospital. If the urine becomes sugar-free, the noon insulin is reduced 2 units a dose until none is being taken at that time. Then the night dose is reduced; and finally, if the urine remains sugar-free and the blood sugar becomes normal, the morning dose is reduced or eliminated.

At least a week before the patient leaves the hospital, a maintenance diet is prescribed. An average diet on discharge is about as follows: C 120; P 75; F 110; 1770 calories. Approximately  $\frac{1}{3}$  of the surgical diabetics leave the hospital without insulin.

#### THE AMBULATORY OR CHRONIC DIABETIC

After the patient is discharged from the hospital he joins the ranks of the chronic diabetics, and requires management of an entirely different character.

The criteria by which the success of the treatment may be judged are:

- (1) A sugar-free urine.
- (2) A normal blood sugar; fasting sugar below 125 mg. per 100 c.c.; after meals sugar below 170 mg. per 100 c.c.

(3) A weight 10% below average for age and height; tables for these weights are merely approximate, but nevertheless serve as an extremely useful guide.

If these conditions are met, the patient is being adequately treated. The chief instrument in accomplishing this is education of the patient. In the Diabetic Clinic at St. Luke's each patient, or some member of the family, is taught to do 3 things: (1) Test the urine for sugar, using Benedict's qualitative solution. (2) Calculate his diet. (3) Give himself insulin. This can be done anywhere, and the equipment required is simple: a test tube, a medicine dropper, a bottle of Benedict's qualitative solution, a 500 gm. food scale, and an insulin syringe with insulin. With a very little patience, this training is not so formidable a task as it might appear to be. By actually performing a sugar test before the patient he can learn to do it in 5 minutes. All except the mildest cases are placed on weighed diets from the first. This often necessitates a struggle, but the effort expended will be repaid many times in the increased interest of the patient once he has mastered the intricacies of this fascinating subject.

I often tell my patients that one reason I enjoy treating diabetics is that the patient does all the work. The routine of a clinic patient who is taking insulin would be as follows, and this applies to private patients as well as clinic patients.

(1) He tests his urine before breakfast and 1 hr. after each meal. A daily record of this is kept and brought to the clinic on each visit. We rarely do 24 hr. determinations now. The 4 daily tests are more reliable indices of how much insulin is required and at what time of day it is most needed.

(2) He weighs all his food until he has become familiar with the prescribed amounts of each; is then allowed occasionally to dine at a restaurant where he has to estimate the quantity of food, after which he does a urine test to see how close he came to his allowance. This can become a fascinating game.

(3) He gives himself insulin. After following the effects of insulin on his tests, he is allowed to increase or decrease the insulin 1 unit a dose as indicated by his tests.



(4) He visits the clinic anywhere from once a week to once a month, depending on the severity of his case. A well trained patient *not* on insulin need not come oftener than once in 2 or 3 months. Blood sugar determinations are done at least 4 times a year. At the clinic a specimen is examined for sugar and acetone; the patient's weight is taken and recorded on his chart to compare with his theoretic normal; and instructions given as to diet and insulin.

#### INSULIN

Of the patients in the clinic 30% are using insulin; amount varies from 5 to 120 units a day; number of doses varies from 1 to 4 a day. The insulin is usually given about 20 minutes before the meal; in some instances as long as 2 hr. before. If 1 dose, it is given before breakfast; if 2 doses, before breakfast and dinner; 3 doses, before breakfast, lunch and dinner; 4 doses, before the 3 meals, and a small dose, from 3 to 5 units, is given at bedtime. When cutting down on the number of injections per day this order is reversed.

I am often asked how to determine the quantity of insulin required in each individual new case. There is no infallible rule. Any patient showing sugar in the urine can start with 5 units of insulin before breakfast. If sugar appears in the urine after the other meals, he can take 5 - 5 - 5; i. e., 5 units before each meal, running the dosage up or down until the necessary quantity is being given. By varying the dosage according to tests of the 4 daily single specimens, an equilibrium is soon reached. Keeping the urine sugar-free appears to improve the patient's tolerance. After a week of sugar-free urine, therefore, the diet can gradually be increased or the insulin decreased. With a thin person the former procedure would be adopted, and with a fat person the latter.

A certain quantity of insulin given 3 or 4 times a day is more effective than the same amount given only once or twice a day, with less risk of an insulin reaction. A patient was referred to me recently who was taking 80 units of insulin daily—40 B—40 D on a carbohydrate allowance of 170 gm.—a severe diabetic. He frequently suffered from insulin

reaction, and showed sugar in his urine on one or more of his 4 daily tests. By redistributing his insulin so that he was taking a dose before each meal and 3 units at bedtime (11 p. m.) he became sugar-free on all his tests and had no more insulin reactions—and this was accomplished on 60 units per day, as contrasted with the 80 units he was previously taking, with no change in his diet.

Insulin reactions are comparatively infrequent in adults. In children they are common. Every child taking insulin of 10 units or more a dose should carry 2 lumps of sugar or an orange to be used in such emergencies. If insulin is taken at all it must be used daily. Patients who test their urine 4 times daily, and vary their insulin accordingly, rarely suffer from insulin reactions. At the most, insulin reactions are disagreeable rather than dangerous.

Liver has recently been added to the diabetic diet. It is an insulin saver;  $\frac{1}{2}$  lb. liver a day will take the place of from 5 to 10 units of insulin. I have a private patient who has been taking liver for 3 months with gratifying results. With no other change in diet he has been able to reduce his daily insulin from 10 units t. i. d. to 5 units once a day, without showing sugar in the urine and with no elevation of the blood sugar. Whether or not this marked improvement can be attributed entirely to liver, I do not know, but it certainly has helped. After 3 weeks of the liver diet the patient balked but since giving him before 2 of his daily meals a well seasoned broth prepared from fresh liver, he has taken it willingly and has thrived on it. The broth is prepared by macerating  $\frac{1}{2}$  lb. liver (it can be put through a meat chopper), and steeping it for an hour in warm water. The pulp then squeezed into the water and the broth set aside in the icebox to be served as required. The preparation is not boiled, as boiling destroys the insulin-saving principle.

Another insulin saver is exercise. A good vigorous walk will use up a considerable quantity of sugar and allow the insulin to be decreased accordingly. Two walks of  $\frac{1}{2}$  hr. are better than 1 walk of an hour. Patients are encouraged to experiment with exercise as they do with food and insulin to determine

their tolerance. Unusually prolonged or vigorous exercise in a diabetic using insulin will produce insulin reactions unless the insulin is reduced from the usual amount. In a diabetic, exercise is a drug second in potency only to insulin and food.

After insulin, the next most confusing aspect of treatment of this disease is the diet. Except in the mildest cases all foods at first should be weighed. This accomplishes 2 things: (1) Educates the patient in the fundamental principles of treatment of his disease, and this is extremely important. (2) Increases coöperation of the patient. In all our cases in which the patient has made a serious attempt to calculate his diet, it has evidently aroused his interest and resulted in more complete co-operation with his physician.

There are 3 types of patients to consider: obese, thin, and children. Obese patients can usually be rendered sugar-free on an under-nutrition diet alone. The buttermilk and orange juice diet already mentioned is an excellent reducing diet provided the patient can be put at rest. Any reducing diet should be as low as possible in fat. Reduction can be accelerated by using insulin, although at first, due to water retention, there may be no apparent loss in weight.

With malnourished individuals, however, and children, no attempt should be made to do without insulin. They need to build up strength and promote growth. Therefore, adequate diets should be prescribed at once and enough insulin given to handle them. Children require from 40 to 50 calories per kilo body weight, and 3 to 4 grams of protein per kilo.

For dietetic instruction the patients fall into 2 categories: (1) Mild cases require only general directions about diet. (2) Those with moderately severe and severe conditions are taught to weigh their diets, or at least to measure them; i. e., to calculate them by the cupful and tablespoonful, instead of by the gram.

Patients in mild condition are merely told to avoid sweets, starches, butter, oil or fat, and anything made with flour. They can usually stand a little reduction in weight, which this so-called "restricted diet" will accomplish. That leaves the patient on a diet consisting

mostly of vegetables, meat, eggs, milk in moderate amount, cheese, and all but the particularly sweet fruits, but he is of course instructed to eat moderately even of the foods allowed. If vegetables are restricted to the 5% variety and fruit limited to grapefruit and oranges, the patient would have difficulty in eating more than 100 gm. C. in a day. Of course broth and tea or coffee without cream or sugar are allowed in unlimited amounts. Water drinking should be encouraged. A few days to a week on this diet will render the urine sugar-free. Bread is then allowed in increasing amounts up to a reasonable number of slices a day, one at each meal. It is well to maintain a moderate restriction of fats and sweets at all times, and to guard constantly against overweight.

Those in severe or moderately severe category are first placed on one of Joslin's maintenance diets; the food to be weighed directly on the food scale without calculating the C., P. and F. food content. Later, as the patient acquires more confidence, he is transferred to a formula, and can vary his diet at will; i. e. his C., P. and F. for the day are prescribed and by calculating these values for the foods he selects he can arrange his diet to suit himself.

Nowadays every diabetic about his usual daily life should be taking at least 100 gm. C. per day. None of my patients are taking more than 190 gm., and the average is about 120 gm. The protein requirement is 0.67 gm. per kilo body weight, and fat enough to bring the diet up to caloric requirements—30 calories per kilo. The fat rarely exceeds the carbohydrate, whereas in the beginning of the insulin era it was usually 2 or 3 times the carbohydrate. In those days patients who were treated most scientifically according to our knowledge at that time were most apt to develop acidosis, while now acidosis in a well treated case is rare.

The surgical diabetic is a special problem and requires careful pre-operative and post-operative treatment. If time permits, 7-10 days should be devoted to preparing the patient for operation. The buttermilk and orange juice diet plus insulin will accomplish this in the allotted time. Fluids should be given



freely, over 100 oz. per day, and should be continued up to 1 hr. before the operation; 6 oz. orange juice with 10 units of insulin are given 3 hr. before the operation; and after the operation 500 c.c. saline is given by clysis and fluids—broth, water, orange juice—are given by mouth as soon as they can be retained. About 100 gm. C. should be given during the first 24 hours. The buttermilk and orange juice diet is employed routinely for the first 2 or 3 days post-operative. It has been shown experimentally, however, that healing of a wound is retarded by a diet too low in protein; hence, after the third day a diet is prescribed containing at least 1 gm. protein per kilogram body weight, and is continued until the patient is discharged.

The acute emergency surgical case on admission to the hospital is practically always on the verge of coma, if not already in coma. These require the prompt and vigorous measures already described under treatment of diabetic coma. An immediate infusion of 500 to 1000 or even 2000 c.c. saline is given, and insulin in half-hourly or hourly intervals as indicated by the blood and urine analyses. In as short a time as 2-3 hr. the acidosis may be sufficiently under control to permit the operation. The anesthetics of choice are either local, gas-oxygen, or spinal. Ether should be avoided as it tends to damage the liver and increase acidosis.

Finally, as you all know, infection of any kind is bad for a diabetic. The first breakdown in S. tolerance is often initiated by an infection. Infection causes a mild case to become severe, at least temporarily, and is frequently fatal to a severe case. Therefore, care should be taken to remove obvious foci of infection; particularly the teeth should be x-rayed, and those teeth showing apical abscesses should be removed. Infected tonsils should be removed.

Particular care also should be devoted to the feet. Arteriosclerosis is more marked in diabetics than in others, and it occurs earlier in life. I have seen in a diabetic girl of 17 arteries so calcified that they cast a shadow on an x-ray film. Hence, abrasions and injuries

to the feet are slower to heal, with the consequent onset of gangrene. This condition is easier to prevent than to cure.

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## HEREDITARY EPISTAXIS; WITH AND WITHOUT HEREDITARY (FAMILIAL) MULTIPLE HEMORRHAGIC TELANGIECTASIA\*

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Since I published my paper on "Hereditary Hemorrhagic Telangiectasia with Familial Epistaxis" in the Archives of Internal Medicine, January 1921, a number of excellent reports on "Hereditary Nosebleed", "Familial Hemoptysis", "Familial Hematuria", "Osler's Disease",\*\* "Hemorrhagic Telangiectasia", gastric, rectal, and renal bleeding of unexplained etiology, have appeared in the medical literature of the world. Most of the papers were published in the medical Journals of Germany, France, England and only a few in America. In study of the subject of "Epistaxis", I reviewed the medical literature for the past 300 years, but especially reports published since 1830.

Nosebleed, or epistaxis, has been an important subject for discussion since Biblical times. It was one of the earliest complaints treated by medical men and healers. Hippocrates (450-357 B. C.) in Epidem. Lib. I. Aphor. 33, spoke of vicarious menstruation (rhinorrhagia) through nosebleed, remarking that those who have confirmed nosebleed into a habit are young persons apt to incur diseases of the chest, pleuritis, pneumonitis, hemoptysis and consumption, probably owing to a metastasis of the nasal irritation to the lungs, but such not taking place, it is held to have a con-

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\* (Read at the Annual Meeting of the Medical Society of New Jersey, Atlantic City, June 13, 1930.)

\*\* The following terms here used as eponyms and synonyms: Osler's Disease; Rendu-Osler Weber Disease; Ullmann-Goldstein's Hereditary Angiomatosis with Hemorrhages; Hereditary Hemorrhagic Telangiectasia with Familial Epistaxis and other hemorrhages.

trary, or preventive, effect of pulmonary affections.

Nasal hemorrhages may be very profuse, Johannes Rhodius (1587-1659) of Padua, in his *Observationum Anatomico-Medicarum Centuriae Tres* (1657, I b, also Frankf. 1676), mentions a patient losing 18 lb. of blood within 36 hours. Bartholin's patient lost 48 lb. and a writer in the *Leipsic Acta Erudita* mentions a patient losing 75 lb. within 10 days. The *Ephemeræ of Natural Curiosities* contain a case report in which the patient bled from the nose without cessation for 6 weeks. In 1820, Professor Chapman treated an elderly gentleman who lost several quarts of blood and mentions 2 persons who bled to death. Claudius Galen (131-200 A. D.), Coschwitz (1616), Fabricius Hildanus (1560-1640), Friedericus Hoffman (1660-1742), Sebizius (1630), Kau (1710 Jena), Block (Jena, 1679), J. Rhodius (1587-1659), Henricus Petraeus (1589-1620), Samuel Rumpfer (1615), Taunton (1830), Sutton (1864), Babbington (1865), Albert Rosenberg (1900 Berlin-Vienna), and others too numerous to mention, have discussed nosebleed or epistaxis associated with various diseases and different constitutions, and often leading to fatal results. Thus, Albert Rosenberg, of Berlin, in *Handbuch Der Laryngologie und Rhinologie*, Vol. III., 2 Hälfte, (by Professor Paul Heymann, pages 697-722, Vienna, 1900), writes on "Das Nasenbluten" giving 369 references from Hippocrates, 400 B. C., to Hastings, December 1897. Friedericus Hoffmann (1740) long ago remarked that persons with frequent and profuse epistaxis when young, had a peculiar constitution like that observed in "bleeders"; also similarly discussed by Laycock in *Medical Times*, page 501, May 17, 1862 (London). Hoffmann observes—"ob-servamus porro, omnes feré eos, quibus sanguis copiosus et frequentius in primis annis per nares erumpit, naturâ valde imbecilles, animo quoque sensibiliores, varisque morborum afflictionibus, spasmodicis et doloribus per omnes feré aetatem subjectos esse; rarius etiam vitam diu protrahere; quippe in juventute in phthisin inclinent, in consistente aetate in malum flatulento-spasmodicum sive hypochondriacum facile incident, atque aetate pro-

veciori ad dolores nephriticos et podagricos multum proclives sunt". (Hoffman-Medic. rational. systemat. Pars II, Sect. I, Cap. I u. Opuse, physioco-medica p. 196, 1740.)

Thomas Laycock, of London (1862) in his lectures on The Haemorrhagic Diathesis and Haemoptysis says: "epistaxis is a symptom of considerable significance, although generally overlooked in persons of phthisical habits". He had often noted it as being premonitory of future hemoptysis, and often, too, observed it as coinciding with intercurrent attacks. In many of his 227 cases of diathetic "bleeders" it was noted that bleeding was nasal (about  $\frac{1}{2}$  the cases) and he found that epistaxis, hemoptysis, hematuria, and hematemesis succeeded or alternated with each other or were "metastatic". He emphasized the fact that epistaxis, repeated and profuse attacks about puberty, in certain constitutions indicates a tendency to hemoptysis and tuberculosis subsequently.

Laycock, Chapman (1839), Sutton (1864), and others believe there was a class of cases in which the hemoptysis and the nose bleed did recur from time to time rather as an hereditary or a rheumatic than a tuberculosis affection, the condition being a "constitutional epistaxis" or "hemoptysis". Laycock (1862) further speaks of mitral constriction as a source of hemoptysis and epistaxis and their close relation to rheumatism. He emphasized the hereditary relationship of nosebleed and blood-spitting. He concludes by saying that the hemorrhagic diathesis presents many of the peculiarities of the rheumatic or gouty, whether we regard the age, sex, hereditaryness, tendency to articular affections, or the exciting causes of the periodic or paroxysmal bleedings.

Hoffman (1740), Taunton (1830), Chapman (1839), Babbington (1865), Rosenberg (1900), Fröhlich (1891) and many of the other older writers recognized the importance of heredity in relation to repeated and habitual nosebleed. It has also been emphasized that attacks of nosebleed frequently precede attacks of acute rheumatic fever.

Chapman, who was Professor of Physic, University of Pennsylvania, prefers the term "hemorrhagia nasi" to "epistaxis" (Medical



Examiner, Phila., Feb. 23, 1839, II, No. 8, p. 117-118). Rosenberg (1900) prefers the term "hemorrhagia narium" or "rhinorrhagia". Chapman says (Jan. 5, 1839) those with short neck and large head are prone to have epistaxis or apoplexy, while those with a narrow, ill-shaped chest, are equally subject to hemoptysis. Nor is it uncommon for *whole families* to be thus distinguished, and who, in some instances, seem to derive the peculiarity by *inheritance*. He refers to instances reported in Andral's work on Pathologic Anatomy, and in an essay on the subject by Dr. Reynell Coates, in the North American Medical Journal. He mentions the writings of Morgagni, Bichat (Anatomie Generale), and Marendel. Mar-



Fig. 1.—Telangiectases on the face. The family tree of this patient is given in Figure 3 (Family 28, Steiner 1, III, 22).

Dr. Goldstein—Telangiectasia.

Steiner: Archives of Internal Medicine, 1917.

endel found no ruptured blood-vessels in these fatal cases of vital (spontaneous) hemorrhages even with the microscope. Chapman says "the dermoid usually effuses in the shape of petechiae or vibices, or what is called hemorrhhea purpurea". Aristotle, Theophrastus, Lucan, and Huxham speak of these hemorrhagic "spots". I am of the opinion that these old writers saw cases of epistaxis with telangiectatic skin and mucous membrane lesions.

C. Hanfield Jones (Medical Examiner, London, I, Nos. 46 and 47, p. 806 and 823, Nov. 16 and 23, 1876) in his Clinical Lectures on Epistaxis does not mention telangiectasia and familial epistaxis. He says, however, that "in these hemorrhages, the deterioration of the capillaries seems to be the essential morbid change".

Valsalva knew that nosebleed occurred more often from the anterior portion of the septum (des knorpeligen septums), and also that "sanguifera vasa intra nares valde turgida circa eam sadem, ubi alae nasi digito plus minus transverso ab imis naribus cum osse committuntur".

Dr. Marvin, of Geneva (Jour. de med. et de chirurg. pratique, 1872) stated that as blood in epistaxis generally came from only one nostril, and most frequently from the anterior third of one of the nasal fossas, he was led to believe that by compressing the corresponding facial artery on the superior maxillary bone near the ala of the nose, the afflux of blood would be diminished and the hemorrhage at once arrested.

Dr. Brunner (Hufeland's Journal) stopped epistaxis by blowing powdered gum arabic through a quill into the nose. In the Phila. Monthly Jour. Med. and Surg., I, No. 2 p. 102, July 1827, a case is reported of a young man aged 19, who continued to bleed until stopped by this method.

Fabricius (Guilhelmus) Hildanus (1682), in his op. observ. et curat. med chir., reported a young married man who had severe nosebleed after each coitus.

J. Rodius mentioned nosebleed following smelling a rose.

T. A. Hall (Virginia Medical Monthly, 1896) says the powder of fungus myces (F.), commonly known as "devil's snuff", has invariably stopped epistaxis when snuffed up the nostrils.

In "Epidemics", Liber I, in the Third Constitution, Paragraph VIII, Section 2, Hippocrates speaks of epistaxis as one of the 4 modes by which ardent fevers came to a crisis. When in these attacks of ardent fevers there was a proper and copious hemorrhage from the nose, they were generally saved by it, and "I do not know a single person who had a proper hemorrhage who died in this constitution". The hemorrhages attacked most persons, but especially young persons and those in the prime of life, and the greater part of those who had not the hemorrhage died. In certain individuals, he says, both the hemorrhage from the nose and the menses appeared at the same time.

Winstead (1858) stopped severe nosebleed by cold, wet applications to the scrotum.

Rosenberg (1900) says Hoffman recognized the importance of heredity in cases of nosebleed. He mentions a case of epistaxis in a child whose father and 4 brothers suffered from epistaxis. Among 27,000 patients of the University Polyclinic for Throat and Nose Diseases (Berlin), he found 367 instances of nosebleed, of which 247 were in males and 120 in women. The largest number occurred in the period of puberty; 101 were between 15-20 years. He mentions a case of a young girl aged 15, who had not menstruated normally but who bled irregularly from the nose, and a woman who missed her periods for 5 or 6 months without pregnancy and who had suffered from epistaxis for 6 weeks when she was seen by Rosenberg. He found nosebleed to vary with climate and seasons—the largest percentage of cases occurred in May, June and July.

Obermeier mentions an interesting case in a young man who had bled from the nose every month for 3 days since the age of 15 years.

Rosenberg mentions severe nosebleed at times after postoperative menopause.

Hubbard reports a pregnant woman who died from profuse nosebleed.

Urbantschitsch, Taubhert and Blondeau noted pregnant women who aborted after nosebleed.

Blondeau (Gaz. des Hop. nr. 149/51 1874) recorded a case of a pregnant woman who aborted following blood transfusion for epistaxis.

Under the term "nosebleed" or "epistaxis" (nasenbluten) as used in this paper, I include bleeding from the nose, the source of which is to be found *in the nose*. *Bleeding from the nose*, as may occur in hematemesis, hemoptysis, postoperative (tonsillectomy and adenoidectomy) conditions, vegetative adenoids, ulcerations and new growths of the nasopharynx, middle ear bleeding, fracture of the base of the skull, etc., is not included. Nor am I considering the numerous other causes of nosebleed in general diseases.

I limit myself in this paper to a discussion of a definite clinical entity, namely, cases of hereditary (familial) nosebleed occurring in

families and often associated with telangiectatic lesions of the skin and mucous membranes.

Cases of nosebleed in several members of a family may occur, without a definite history of the presence of telangiectasia. However, in some instances, as well as shown by Fitz-Hugh (1923), other members may be thus affected (with skin lesions) in future generations. He believes an atavistic tendency in this condition has been demonstrated, having noticed atavistic skipping of a generation in 7 cases. Foggie's family shows this atavistic tendency.

Gossage believes that in some of these families many of the children die young, before an opportunity has been afforded to know whether they would also have been similarly affected—which accounts for fewer affected ones. He says "the condition of multiple hereditary telangiectasis seems also to be a dominant to the normal condition".

Henle believes the condition acts as a simple dominant with some variations.

It is also true, I believe, that cases of familial hematuria (Apert 1907, Foggie 1928, Attlee 1901, Pearson 1904, Aitken 1909, Guthrie 1902, Hurst 1923, and Grandidier), familial hemoptysis (Libman and Ottenberg, Dec. 1923, and Mantchik, 1922), familial hemorrhagic nephritis—(Hurst 1923) and hereditary hemorrhagic telangiectasia, with or without familial epistaxis, are all properly classified under the same heading.

H. Gawen Sutton, Assistant-Physician to the Metropolitan Free Hospital, in the December 1864 issue of the Medical Mirror (pages 769-781) in a thorough manner discusses "Epistaxis as an Indication of Impaired Nutrition, and of Degeneration of the Vascular System". He emphasizes the important part played by imperfect nutrition and degeneration of the vascular (capillary) system, and discusses the well-known fact that those who bleed habitually from the nose are more liable to certain diseases than others. Thus, he shows that it frequently occurs in individuals subject to rheumatic fever, hemoptysis and phthisis in adult life.

J. J. Kam (1745) in "De haemorrhagiae narium in junioribus nimiae noxis" (Argen-



torati) also observed that there is a connection between the epistaxis of youth and the hemophysis and phthisis of adult life.

J. Haan 220 years ago, in "De hemorrhagiarum" (1711, Argentorati) reported similar experiences.

Laycock (1862) stated that he has often noted epistaxis as being premonitory of future hemoptysis.

French, in his "De Curandis Hominum Morbis", stated "that young people who had been subject to oft repeated nasal hemorrhage have to fear hemoptysis, and that hemoptysis is hereditary in some families, and those liable to it may succumb in the flower of their age to this hemorrhage or to consumption".



Fig. 2—Telangiectases on the tongue. The family tree of this patient is given in Figure 3 (Family 26, Steiner 1, IV. 12).

Dr. Goldstein—"Epistaxis and Telangiectasia." Steiner: Archives of Internal Medicine, 1917

Chomel has stated in his essays on rheumatic fever that Hippocrates said, in the end of the second volume of *Prorrhethicon*, that those who had been subject to epistaxis in their childhood and youth were particularly predisposed to arthritic fevers. Chomel found that 1/3 of those who had rheumatic fever had previously suffered with nosebleed.

Sutton (1864), too, has found that of 31 patients suffering from rheumatic fever, 21 previously had epistaxis. There are patients who have previously suffered from rheumatic fever who later have repeated attacks of epistaxis. He reports the case of a lady, age 74 years, who had severe attacks of hemoptysis and bled profusely from the nose when a young girl, and another woman aged 46 years who had bled from the nose when a child and now was suffering from hemoptysis; her

father suffered from a "ruptured blood-vessel of the lungs" and hemoptysis; an only brother, who died of inflammation of the lungs, also had hemoptysis and for a number of years before his death often bled profusely from the nose; her 3 sons all bled from the nose; an only daughter, aged 28 years, had never had attacks of epistaxis. Sutton reports a second family in which there were 3 brothers who had nosebleed; one who died at 31 years of age, bled profusely from the nose for many years before he began to spit up blood ("pints"); another who had suffered from epistaxis was later laid up with rheumatic fever. Sutton says the belief that epistaxis is hereditary in some families has been asserted by so many physicians that it would be difficult not to believe that it is so. It is important to remember that there is a connection between epistaxis of youth and rheumatic fever, valvular disease, hemoptysis and phthisis of adult life.

Hoffmann, also, has stated that those who suffer with frequent and copious epistaxis in early years are often subject in youth and adult life to hemoptysis and phthisis, and middle age to gravel and gout.

Sutton tabulates 83 cases of phthisis of which number 55 had epistaxis at some periods of their lives. He also found that during phthisis epistaxis often occurred before the hemoptysis.

J. C. Taunton (Article III, June 1830, p. 489, IV, No. 24, London Med. and Surg. Jour.), Surgeon to the City of London Dispensary, reported his own case of recurrent epistaxis for 20 years. His parents were apparently healthy.

Boenninghaus, of Breslau (1923), speaks of habitual nosebleeds in patients he has seen off and on during 20 years, bleeding from "vena lininis" and not from "locus kisselbach of the septum". He mentions that Valsalva knew of this source of habitual nosebleed, and stopped the hemorrhage by means of finger pressure. Boenninghaus stopped the bleeding point with the electric cautery or the chromic acid bead.

Fröhlich, of Cassel (1891, *Der Artzliche Praktiker*), reported a young patient with recurrent severe nosebleed; a brother died from

epistaxis; his only sister bled profusely since the first menstrual period; no mention is made as to the parents bleeding from the nose.

Korstakow (1886) mentions a case of *menstruatio precox* with severe periodic epistaxis.

Fricker (1844) reports fatal nosebleed of vicarious menstruation.

Barford (1926) reports 2 cases of recurrent gastric hemorrhage without organic lesion and associated with other hemorrhages. In 1 case there occurred recurrent severe hematemesis with occasional epistaxis and hematuria.

Hurst (1923) reported 16 individuals in 3 generations suffering from hereditary familial congenital hemorrhagic nephritis. These cases were similar to Guthrie's (1902) series of congenital hereditary and familial hematuria. Up to 1912, Hurst could only find records of 2 other families similarly affected. Since 1912, he says (1923) he learned of 2 additional families through Dr. W. W. D. Thompson, of Belfast.

E. Libman and Reuben Ottenberg, of New York (Dec. 15, 1923), reported 7 members of a family suffering from rather profuse hemoptysis at intervals for years, beginning at puberty or in early adult life and not seriously impairing the general health. Tuberculosis was excluded. No telangiectases were seen in the upper air passages bronchoscopically. No mention is made of telangiectases in any other part of the body. In the cases recorded the condition seems not to skip generations. The coagulation time was normal. Blood platelets were normal. They say that "if the condition is due to telangiectases, they must be localized in the finer bronchi or in the pulmonary tissue". They were unable to find a report similar to theirs in the literature. "Idiopathic familial hematuria", reported by Apert, is mentioned as perhaps being "comparable" with their cases.

It seems probable, according to F. Parkes Weber, of London (1924) who has studied this subject extensively, that "gastrostaxis" cases, as reported by Sir William Hale White, and I may add, those reported by Pons, Meine and Blenkle (Feb. 1929), before our New Jersey State Society, may have been of similar

telangiectatic origin. Pons, Meine and Blenkle (*Jour. Med. Soc., N. J.*, 26:143, Feb. 1929) did not mention telangiectasia as a possible cause for the hematemesis in their cases.

Foggie (*Edinburgh Med. Jour.* May 1928, p. 280) of St. Andrew's University and Dundee Royal Infirmary, reports the case of a woman, aged now 47 years, who suffered from hereditary hemorrhagic telangiectasia with recurring hematuria. He was able to collect 41 reported families; with his family making altogether 42. He includes the 31 family groups I was able to collect from the literature of the world up to 1920, inclusive, and reported in January 1921. I did not include the cases of familial nosebleed mentioned by Sutton (1864), and Rosenberg (1900), and the case reported by Professor Vincent Tanturri, of Naples (*Morgagni*, XXI, Aug. 1879) under the title of "*Un caso di dermostasi venosa generale ed idiopatica*". In this case no mention is made of epistaxis or other recurrent hemorrhages. The girl was 14 years of age and had generalized telangiectasia.

Babington (1865). Rosenberg (1900), Richardson (1917), Boston (1930), Goldstein (1922), Lane (1916), Verneuil (1894), Fröhlich (1891), Griffin (1927), Blumenfeld (1926), Sutton (1864), reported cases of familial (hereditary) epistaxis. In 1922 I reported several cases of recurrent nosebleed in one family and recently I met with another family in which several members (father, sons and daughter) bled profusely from the nose.

Foggie's patient gave a history of nosebleeding in 5 generations associated with telangiectases. She only occasionally bled from the nose but bled from the urinary tract for 20 years, due to these vascular dilatations.

T. C. Fox (1908) reported a case of bilateral telangiectases of the trunk with a history of marked epistaxis in childhood and recent rectal bleeding.

Erasmus Wilson, of London (*Jour. Cutan. Med. and Dis. Skin*, London, III, p. 198-199, 1869), under "Clinical Memoranda" and the subtitle of "Eruptive Angiomata" reports a case of a publican, aged 30 years, who had copious bleeding from the gums, epistaxis and an eruption of red papules on the face, neck,



hands and arms—"Angeiktasia" or multiplication and hypertrophy of the venous capillaries of the skin. He says "the case is very rare"; thought this was a sudden eruption of "angioma associated with hemorrhage from the mucous membrane of the nose and mouth", but fails to mention other members of the family with this condition.

Kalischer (1901) reports a case of telangiectasia (angiom) of the face and "der Weichen Hirnhaut" (Archiv. f. Psychiat, Berlin, 1901, Bd. 34, pages 171-180).

R. H. Kennan, of Sir Patrick Dun's Hospital (April 30, 1902) reported a typical family with telangiectasia and epistaxis, mentioning Osler's report in the Johns Hopkins Hosp. Bull., November 1901. Osler, however, overlooked several previously reported cases of familial epistaxis and of hereditary telangiectasia. He includes several of these in his second paper in the quarterly Journal of Medicine (London), October 1907, with colored plates of A. Brown Kelly's (1906) case.

Rendu (1896) was the first to associate the tendency to epistaxis with multiple telangiectases as manifestations of a distinct clinical entity, now, however, frequently called "Osler's Disease".

Time will not permit to review the additional cases reported from 1876 to 1930. Suffice it to say, that Coe (1906) reported, erroneously, a case as hemophilia which was reported as a typical case of "hereditary telangiectasia" by Osler, and that since Legg (1876) and Chiari (1887) reported their cases there have been reported a total of 65 families and about 350 individuals suffering from hereditary (familial) epistaxis with hemorrhagic telangiectasia including my cases reported in 1921 (Arch. Int. Med.) and in 1922 (Jour. Med. Soc. N. J., 1922 p. 50), and including Kofler's (1908) cases. Since the publication of my first paper there have appeared a number of excellent reports on the subject. It might be of interest to list all the typical and atypical cases reported to date, but I shall limit myself to the more easily accessible and available reports.

Recently, Professor Rudolf Schoen, of the Morawitz Clinic, in the University of Leipzig, reported 2 cases of "Familiare telangiek-

tasie mit habituellen nasenbluten" (affecting 4 generations), in the Deutsches Archiv für Klinische Medizin, Bd. 166, Heft 3/4, 1930.

A. Arrak (1925), of Masing's Clinic, in the University at Dorpat, Esthonia, reported 2 families with hereditary hemorrhagic telangiectasia (Deutsches Arch. f. Klin. Med., 147, June 1925, pp. 287-291).

Dore's (1927) case of multiple familial telangiectases was a woman, aged 56 years, who had multiple telangiectases for 14 years. She had them also on the tongue, lips, hands, under one nail, a few on the body. She suffered from frequent nosebleed. Her mother had multiple telangiectases. Patient does not know whether other members of the family were similarly affected. Electrolysis was tried. Dore used carbon dioxide snow. This was the third case of the kind he had seen. One of the patients (a man) said that the condition had been known in his family for a hundred years. The third patient was a young woman, but no other members of her family appeared to be affected.

F. Parkes Weber, of London, discussing this presentation, said that "though the tendency was inborn, the lesions of the skin and mucous membranes manifested themselves or were often first observed at relatively late periods. The nosebleeding, however, was often noted earlier".

R. A. J. Harper (Apr. 1929) reports the case of a man, aged 45 years, who had hemorrhages from the nose, gums and tongue. He had red "spots" on the cheeks and ears, tongue, gums and palate. Epistaxis was frequent. Stools were black at times. No blood in urine. His father and a sister (47 years of age) and her 2 young sons suffer similarly. The patient himself has 7 children; 3 sons are well, while 4 daughters are all affected.

Willis C. Lane (Mar. 1916, University of Maine) reports cases of "hereditary nosebleed", but no mention of telangiectasia is made.

Schwartz, of Minneapolis (1925), reported a case in a woman, aged 49 years. She suffered from severe nosebleed since the age of 14; also severe hemorrhages from the tip of the tongue and from the tip of her right lit-

tle finger. She had reddish "spots" on her face, tongue, soft and hard palate, nose, conjunctiva, auricles, cheeks and hands, for many years. Her mother died of frequent and almost uncontrollable nasal hemorrhages. The coagulation time was 5 minutes, bleeding time  $2\frac{1}{2}$  minutes.

Curschmann, (April 1930), of the Medical Clinic of Rostock, reports 2 families with familial epistaxis as an expression of "pseudo-hemophilia". He overlooked, entirely, the extensive literature now available on the subject of familial epistaxis and hereditary telangiectasia—"Rendu-Osler-Weber Disease". Because of the free nosebleed in all these cases, Curschmann calls it "monosymptomatic bleeding without thrombopenia and without hemophilia". He advises the use of Roentgen ray therapy over the spleen.

Kozach, of Hamburg, discussing Curschmann's paper before the Northwestern German Association for Internal Medicine at Hamburg-Eppendorf, January 31, 1930, mentioned a family suffering from epistaxis.

Thomson and Mason Lamb, (1928) of Birmingham, England, reported a case of an unmarried woman of 30 years who had severe bleeding from the mouth during the night, lasting 9 hr. continuously; blood "ran in a stream out of her mouth". Since the age of 12 years she had severe bleeding from the nose, and also bled from the ear, scalp and lip. Her father, paternal grandfather and 1 of the father's cousins were similarly affected; 1 of the father's brothers died at 14 months, following hemorrhage after operation (in 1876 or 1877). The patient's coagulation time was 1 minute and 30 seconds. The blood-calcium and cell fragility were normal. Blood Wassermann was negative. They discuss Sir Thomas Lewis' theories and explanations for the development of telangiectases.

Williams (1926) reports instances of hereditary hemorrhagic telangiectasia with nosebleed in 4 families. He believes that the disease is "exceedingly common". While, perhaps, many cases go undiagnosed, I do not believe that the familial hereditary type of this condition is so very common. I agree with Williams that the hereditary character of this condition is necessary for a correct diagnosis and

it is precisely this feature which is sometimes difficult to establish. Further, that the essentials of the disease entity described here are as follows: (1) The occurrence of nosebleed in childhood, often recurring throughout the life of the patient, and sometimes associated with bleeding from other mucous membranes—stomach, bowel, bronchi, gums, and even from the skin, lips, ears, fingers, conjunctiva, tongue, and meninges. The bleeding may decrease, but very often becomes more serious and may even prove fatal as the patient grows older. The mother of 1 of my patients died as the result of a severe nasal hemorrhage. (2) The development of telangiectases, sometimes as *dilated capillaries*, or as *arborescent, distended venules*, or as small pinkish or dark red *spots*, smooth and uniform without visible venules which disappear completely on pressure often only pin-point in size. They may appear suddenly and last for several years and then disappear. *Small nodular forms* raised, and of bright red or purplish color may be met with. These were formerly thought to be associated with malignancy of the stomach and liver. We also meet with *spider forms* (naevus araneus type), often seen on the cheeks and eyelids of children and young patients. The *mat form* being large lesions, sometimes seen associated with cirrhosis of the liver and leukemia, and lastly the *generalized forms of telangiectases* noted by Osler and so thoroughly discussed in one of the best papers on the subject by Becker, of Chicago (1926). In my paper I am discussing only the multiple hereditary forms of telangiectases associated with recurring hemorrhages, and present in several or many members of the family and in several generations. (3) The occurrence of these symptoms in several members of the family is essential for the diagnosis. We may have, however, in some members of the family, hemorrhages from the nose alone or from other parts of the body, with or without hemorrhagic hereditary multiple telangiectasia.

Time will not permit the review of many interesting cases of this clinical entity. I will simply list the typical and atypical cases reported in the entire medical literature of the world since 1830.



*Typical cases of hereditary hemorrhagic telangiectasia* with recurring epistaxis and other hemorrhages: Wilson (1869), Legg (1876), Chiari (1887), Chauffard (1896), Rendu (Oct. 23 and Nov. 24, 1896), Osler (1901), Josserand (1902), R. H. Kennan (April 30, 1902), Kelly, A. B. (1906), Coe (1906), Hawthorne (Jan. 13, 1906), Osler (1907), Weber, F. P. (1907), Gottheil (1907), Kofler (1908), Ballantyne (1908), Semon (Jan. 10, 1908), Waggett (1908), Phillips (1908), Hanes (March 1909), Langmead (1909 and March 1910), Laffont (Oct.

din and Soulie (Jan. 2, 1929), Erdheim (Feb. 1929), Harper (April 1929), Rudolph Schoen (1930), Boston (March 1930), and Curschmann (Apr. 12, 1930).

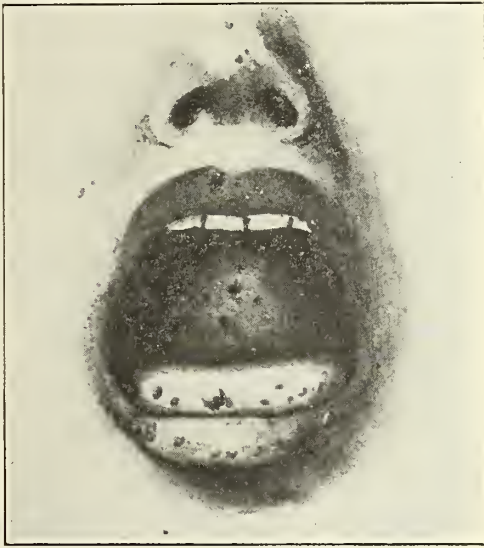
*Cases of familial epistaxis.* Sutton (1864), Babington (Sept. 1865), Frohlich (1891), Verneuil (1894), Rosenberg (1900), Lane (1916), Blumenfeld (1926), Giffin (1927), Goldstein, H. I. (1930).

*Atypical cases of (familial) epistaxis or hereditary telangiectasia.* Taunton (1830), Tweedie (1841), Sutton (1864), Babington (1865), Tanturri (Aug. 1879), Vidal (1880), Frohlich (1891), Gaston (Feb. 8, 1894), Verneuil (May 29, 1894), Ullmann (1896), Kopp (1897), F. J. Smith (1898), Blaschko (1899), Du Castel and Baudouin (1899), Kalischer (1901), Joseph (1904), Armand (1905), Weber (1907) mentions a case reported Dec. 12, 1900, before the Dermatologic Society of London, with familial multiple venous angiomas; W. Bligh (Feb. 23, 1907), Adamson (1907), Passini (1907), Pollitzer, Mayou (1907-1908), Lack (1908-09), Fox (1908), Hyde (1908), Steiner and Voerner (1909), Galloway (1910), Frick (1912), Stokes (1915), Lane (1916), Miescher (1919), Miller (May 1923), Blumenfeld (1926), S. W. Becker (1926), Giffin (1927); (Becker, Sept. 1927), Weber, F. P. (Sept. 24, 1927), Memmesheimer (1928), H. I. Goldstein (1930), Kozach (1930);

Terrien and Prelat ("Telangiectasie generalisée et cataracte congenitale", Nov. 6, 1909) and M. Vulpian report patients dying from epistaxis and hemoptysis under the title "Hemophile — Pas d'antecedents d'herédité ou de famille" (Feb. 1886).

*Familial hemorrhages*, hemoptysis, hematuria, hematemesis, bowel and rectal bleeding, and other atypical cases—(non-hemophilic and non-purpuric). Atlee (1901), Guthrie (1902), Pearson (1904), Bennecke (1906), MacCallum (1906), Thomson (Belfast), Ohkubo (1907), Grandidier, Kausch, Apert (1907), Aitken (1909), Adler (June 1909), Mantchik (1922), Libman and Ottenberg (1923), Hurst (1923), Barford (1926), Foggie (1928), Virgil Schwartz (1925), and others.

Miescher (1919) reports a case of telan-



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Osler's Paper: Quarterly Journal of Medicine, 1907.

30, 1909), Audry (Jan. 1911, and 1920), Osler (1911, mentioned by Steiner 1917), Van Wagenen (1912), Sequeira (1912-1913), Gjessing, E. (1916), Hutchison and Oliver (Jan. 1916), H. B. Richardson (1917), Steiner, W. R. (1917), Paul, S. N. (1918), Gundrum (March 1919), Goldstein, H. I. (1921), Freudenthal, W. (1921), Goldstein, H. I. (1922), Fitz-Hugh (Dec. 1923), Schwarz (1925), Gulland, G. L. (May 19, 1923), East (Oct. 12, 1923 and Feb. 13, 1926), A. Arrak (June 1925), Emile-Weil (June 25, 1926), Williams (1926), Mekie (March 5, 1927), McKinstry (May 1927), Archer (Sept. 17, 1927), Balph (Dec. 22, 1927), Mackay and McKenty (1927), Thomson and Mason Lamb (1928), Van Gilse and Postma (1928 and 1929), Roles (1928), Flan-

giectasia in a woman, aged 71 years, whose mother died at 80 years from epistaxis. Her 31 years old daughter is well. She had telangiectases and tortuous capillaries on the nose, cheeks, forehead and legs. Blood Wassermann was positive. He reports a second similar case. He was able to find 19 similar cases since Brocq's compilation. He fails to mention epistaxis or other hemorrhages in his 2 cases.

Steiner and Voerner (Deutsch. Arch. f. klin. Med. 1909, Bd. 94, 105) speak of "angiomatosis miliaris" and report several cases. They report a young man aged 29 years, with general symmetric telangiectases—pin-point to pin-head in size, on the chest, abdomen, genitalia, arms and lips. He had pollakiuria, quick pulse, neuralgias, and anidrosis.

Francis C. Roles (November 1928, pp. 19 and 20, St. Bartholomew's Hospital Journal, Vol. XXXVI, 1928-1929, London), reports a case of multiple telangiectasis with splenomegaly in a married woman aged 65 years, a machinist, suffering from "abdominal pain and indigestion". She had red "spots" on the face and hands, nose, lips, tongue, cheeks, and legs, which appeared to "come out" singly or in crops. Three years ago she had a thrombosis in the right calf and cirrhosis of the liver. A large telangiectasis on one of her fingers bled profusely; there was no hematuria but increased frequency of micturition. She had severe epistaxis. No family history of epistaxis or of "spots". She had lesions of 3 types: pin-point, spider form (most common), and the nodular variety. Three of the nodular type on a finger, each side of nose, and on left cheek bled quite profusely. The spleen formed a firm, well-defined tumor the size of an orange and showed a well-marked notch. It was not tender. The coagulation time was 2 minutes, 27 seconds; and the bleeding time, 2 minutes, 36 seconds.

Gastou, P. (Feb. 8, 1894) speaks of "congenital and hereditary vasomotor telangiectases" and reports the cases of a father and daughter. The father, daughter, and paternal ancestors, all had red hair and a very high facial color. Both father and daughter had generalized telangiectasia. When 23 years of age the father had a "stroke" with left sided hemi-

plegia which almost entirely disappeared in 2 months. The daughter had vascular dilatations on the hands, and after a confinement the telangiectases showed a tendency to spread. He concludes that these cutaneous vascular dilatations may be the result of a vasomotor paralysis through congenital, hereditary or acquired modifications of the vascular vasomotor centers, and he therefore designates the condition as "generalized vasomotor telangiectases". He fails to mention epistaxis or other hemorrhages.

Romme (Presse Med. Paris, Apr. 24, 1909) reviews the literature and discusses hemophilia and hereditary hemorrhagic telangiectasia but does not report any cases of his own.

E. Gjessing (1916) reports 3 cases. One of his patients, a man aged 30 years (whose father and sister were similarly affected), bled profusely from the nose when a child. Nose-bleed became more severe as he grew older. He had bled from the mouth on one occasion. He suffered from heart disease, severe anemia, and from *retinitis hemorrhagica*.

Coschwitz (1616) mentions that frequent scratching with the finger-nail at the anterior part of the septum may be responsible for epistaxis.

Valsalva knew that the most frequent source of nosebleed was a site on the anterior portion of the cartilaginous septum. This site of predilection for nosebleed was later described by Michel, Little, Hartmann, Kiesselbach, Zuckerkandl, Hajek and others.

Rendu (Semaine Med. IV, June 12 and 26, 1884) emphasized the interesting fact that epistaxis in a young patient (with or without valvular disease) is often a premonitory symptom of an attack of rheumatism, particularly in girls, when not occurring as vicarious menstruation.

Verneuil (May 29, 1894) speaks of "Juvenile, Hereditary and Heredo-Hepatic Epistaxis" and reports illustrate *familial cases*. He speaks of familial and hereditary epistaxis as a reality. Forgues and Besnier say this form of hereditary epistaxis in children and adolescents occurs in families predisposed to spontaneous hemorrhage and which is often mistaken for hemophilia.

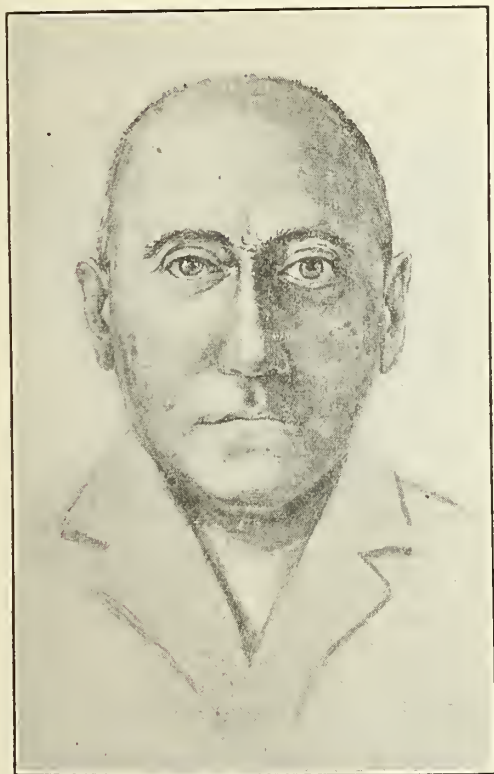
Curtius (Nov. 1928) speaks of nasal septum



varicosities and Osler's disease as a manifestation of general hereditary dysplasia of the venous wall or a "status varicosus".

Du Castel and Baudouin (1899) report a case of hereditary telangiectasia in a man aged 25 years. Other members of his family had the same condition. No mention is made, however, of familial nosebleed.

Becker (Sept. 1927) in his paper on "Generalized Telangiectasia" reports (Case 2.) the case of a girl aged 29 years, complaining of changes in the skin and nails. One sister and



Dr. Goldstein—"Telangiectasia" case of Prof. Schoen, Leipzig.

Prof. Schoen (Leipzig) *Deutsch Arch. f. Inn. Med.*, 1930

2 brothers were subject to frequent nosebleeds, and her father also had nosebleed occasionally. She had nosebleed when in a warm climate, generally at the time of the menses. She had bilateral coronary cataract; apparently no telangiectatic lesions of the mucous membranes. Her finger nails were abnormal, and she had marked follicular hyperkeratosis. Marked erythema of her cheeks and chin and dilated vessels were noted.

Flandin and Soulie (Jan. 2, 1929) reported a woman 54 years old affected with hereditary hemorrhagic angiomas. She suffered from profuse epistaxis and had carmin-red vascular spots on the cheeks, chin, tongue and fingers. She had an intense anemia. The bleeding and coagulation time was normal and the clots were retractile.

Mekie's (March 3, 1927) patient was a man aged 38 years who had numerous telangiectases on the lips, nose, cheeks, tongue, nasal septum, gums, soft palate and penis. He suffered from frequently recurring nosebleed and advanced pulmonary tuberculosis. His father, grandfather, 2 uncles, sister and 3 cousins were similarly affected. His 7 children, under 15 years, were apparently not affected. One of the affected cousins died at the age of 28 years from a "ruptured vessel in the brain".

Kofler, (Karl, 1908) reported a man aged 50 years who had repeated hemorrhages from the nose and lips. He had "spots" (telangiectases) on the face, lips, nose, nasal septum, mouth, ears, scalp, extremities and trunk. His mother and brother were similarly affected. His children were apparently not affected.

Kofler erroneously reports this case as "Naevus Pringle of the Skin" and while he knew of Osler's and Parkes-Weber's cases, he did not think they were the same. I consider this a typical example of hereditary telangiectasia with epistaxis (familial).

Van Gilse and Postma (1928) of the University of Amsterdam, report 4 cases (from 2 Dutch families) all suffering from severe persistent nasal hemorrhages as a symptom of congenital telangiectases of the skin and mucous membranes.

Audry (Jan. 1911) reports the case of a man aged 70 years who for many years had almost daily nosebleed. He had telangiectases on his face, lips, palate, tongue, trunk and arms. His mother, great aunt, cousin, niece, maternal uncle, 5 brothers and sisters, 2 sons and several nephews were all similarly affected. He considers Chauffard's (1896) a non-familial (atypical) case.

Langmead's (March 1910) patient was a man aged 68 years. He had 30 small telangiectases, and frequent nosebleed; occasionally the face or tongue would also bleed.

Secondary anemia was present in 1907. In 1909 the blood count was normal and he was considerably improved. Four brothers, 1 sister, his father, and 2 sons, and a daughter of 1 of his brothers, were similarly affected. The patient's mother suffered from severe epistaxis.

Erdheim (Feb. 1929) was able to collect from the literature 55 families with this disease. He reports 6 persons (who are now alive) in 1 family, who have frequent attacks of epistaxis with no serious consequences. He also gives reports of 5 persons deceased, 2 of whom probably died as the result of the severe repeated hemorrhages. He is convinced from his studies of 49 cases that the telangiectatic lesions were first noticed in 31 cases under the age of 30, and in the other 18 past the age of 30. The lesions seem to become aggravated in many patients in later life.

Fatal hemorrhages in some of these cases were reported by Kelly, Legg, Chiari, Phillips, Gottheil, and others.

Paul (1918) reported the first Australian cases. He reported a woman aged 32 with hereditary angiomas and epistaxis. He traced the disease as far back as the great-grandmother and both her daughters, and grandmother of Paul's patient; 21 members of this family were affected.

Archer (Sept. 17, 1927) reported a case of multiple cavernous angiomas ("of the sweat ducts") associated with hemiplegia in a man aged 30 years. One brother shows the same telangiectatic lesions. Parents are alive and well. Patient suffered from frequent attacks of bilateral frontal headache. In 1918 he developed a right hemiplegia (at 21 years of age). The attack came on suddenly during the day. Complete recovery took place in 2 years. In 1922, he had a similar attack in addition to involvement of the left side of the face with loss of speech. There was no loss of consciousness in either attack. He recovered completely from the last attack, except for pain in the extremities and back. The patient seems mentally dull. He always feels "cold". The optical discs show a varicose and degenerated condition of the retinal vessels, but not hemorrhages. The skin shows multi-

ple small pinhead disseminated angiomas distributed over the lower thorax, abdomen, sides of trunk, buttocks, thighs and genitalia. The mucous membranes of the lips, cheeks, and soft palate were also involved, but not the tongue. Spinal fluid and blood Wassermann tests were weakly positive. No reports of the blood platelets, blood chemistry, basal metabolism, radiograph of the sinuses, skull and teeth are included. No hemorrhages from the nose or mouth are mentioned. Archer considered the hemiplegia due to bleeding from a similar (angiomatous) varicose and degenerated condition of the vessels in the brain. He mentions, further, that such mental sluggishness is a frequent symptom in lichen planus, adenoma sebaceum and hypothyroidism.

McKinstry's patient (May 1927) was a girl aged 19 years, with advanced bilateral pulmonary tuberculosis. She bled from the nose and had 5 or 6 punctate subcutaneous hemorrhagic spots on the tips of her fingers, and "spider webs" (telangiectatic) in the anterior part of the nasal septum. Her father was a "bleeder".

Laffont (Oct. 1909) mentions the observations by Kopp, Chauffard, Rendu, Steiner-Voerner, Blaschko, Joseph, and Hanes, and reports his own cases. He divides the cases into hemorrhagic and non-hemorrhagic types.

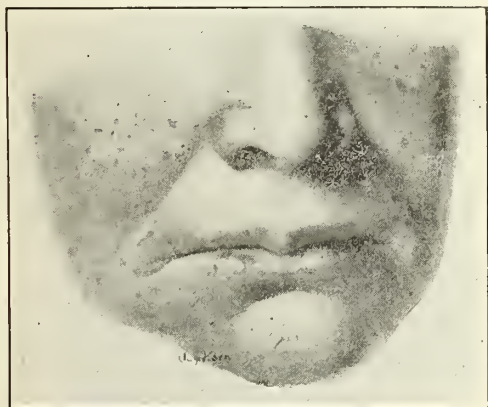
Hart-Drant (May 14, 1923) reported an atypical case of acquired multiple punctate telangiectases of 7 years' duration in a white woman aged 40. Epistaxis is not mentioned.

I shall not review in this paper the interesting cases reported by Guthrie (1902), Aitken (1909), Legg (1876), Hutchinson and Oliver (1916), Gundrum (1919), Osler (1901, 1907, 1911), Hanes (1909), Steiner (1917), F. Parkes-Weber (1907), Fitz-Hugh (1923), East (1926), Griffin (1927), Balph (1927), L. N. Boston (1930), Van Gilse and Postma (1928, 1929), and others.

Recently (January 1930) there was a patient (Max G. 1930-15) in the service of Professor Alfred Stengel, University of Pennsylvania Hospital, who died as the result of persistent severe hemorrhages, shock from repeated large blood transfusions, toxic hepatitis, and cholemic nephrosis. The man was 64 years old. For many years he had severe



recurrent attacks of nosebleed, and many telangiectatic lesions in the nose, roof of mouth, trachea, left bronchus, and rectum. In September 1927 he had "black stools", and in June 1929 he had very profuse nosebleed, requiring blood transfusion. Bleeding and clotting time and blood-platelets were normal. He had an enlarged spleen.. At necropsy the spleen was found to weigh 660 gm. Size 19x3x7 cm.; slate gray in color; areas of hemorrhage were noted. No gross evidence of telangiectases was found in the stomach and intestines. Seven other members of his family including 1 brother, 2 sisters, 1 son, 3 daughters and his mother, all bled from the nose.



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Osler's Paper: Quarterly Jour. of Med., 1907.

#### TREATMENT

As the condition is due to some hereditary defect of the vascular system, little can be done. For the local bleeding, the chromic acid bead, electric cautery, carbon dioxide snow, astringents and radium have been tried. Administration of calcium by mouth and intravenously, parathormone injections, viosterol; ultraviolet ray and x-ray therapy, liver, liver-fraction, iron, arsenic, and endocrin therapy have given varying results. In severe hemorrhages, whole-blood injections, blood serum, blood-transfusion, coagulen, stryphnon (Meyer and Albrecht), thromboplastin, afenil and calcium gluconate may be useful.

Professor B. Niekau (Tubingen) and Professor F. Llopis (Madrid) recommend the use of Nateina Llopiase, a mixture of vitamins

A, B, C and D, of vegetable origin, to which calcium phosphate and lactose have been added. Five tablets are chewed before meals. This is considered a good remedy in hemophilia.

Taylor (July 1929) has apparently cured purpura hemorrhagica by the use of bothropic antivenin.

Reindu suggests cold compresses to the head and neck, lifting the arms, decoction of walnut leaves, or a little alum, tamponing when necessary, and the administration of opium. Gubler believes opium is the best remedy in some cases when epistaxis is excited by excessive nerve stimulus.

Paguey (Paris, 1831) recommends the introduction of a piece of hog's intestine prepared in the form of the finger of a glove and this can be filled with fluid by means of a syringe after which a ligature is applied to prevent escape of the fluid. Thus, the mucous membrane of the nose is compressed and the hemorrhage arrested. Wicks of lint moistened with alum solution were used for tamponing. He used wine of quinin and iron as tonics.

Gjessing uses calcium lactate regularly and as a prophylactic remedy.

Osler used calcium chloride.

Emile-Weil suggests using carbon-dioxide snow (June 1926) and has obtained some good results.

Leeches applied to the back of the neck and to the buttock was advised by Scharin, of Russia.

Compression of the nose with thumb and index finger is at times a useful procedure. Stenger (1915) in his thesis for the University of Würzburg, discusses, most thoroughly, the various forms of treatment for nasal hemorrhages. He suggests the use of cauterization with chromic acid crystals or silver nitrate for the telangiectases, followed by loose tamponage with 10% bismuth ointment. He has also tried styptol, secacornin, coagulen and the gelatins.

McBride (University of Penna. Med. Mag. II, 1889-1890, pp. 424-426) reports 2 fatal cases of nosebleed and 1 case that was nearly fatal; the last patient, a law student, aged 17, who bled for many days. D. Hayes Agnew

suggested 2 cylinders of bacon so as to tightly plug the nostrils. This stopped the bleeding for awhile. Later, McBride used a cylinder of ham fat which "acted like a charm". Edward Martin and the late J. William White, of the University of Pennsylvania, also saw this patient. In the hypertensive, arteriosclerotic cases *angioxyl* may be given by injections and by mouth, and also *iodides*.

#### CONCLUSIONS

(1) A review of the literature of the world on the subject of familial epistaxis and hereditary telangiectasia is here briefly discussed.

(2) There are probably a total of 65 families and about 350 individuals suffering with this clinical entity—"hereditary (familial) epistaxis with multiple hemorrhagic hereditary telangiectasia"—on record in the entire available medical literature of the world.

(3) Many cases, no doubt, have been overlooked by the otolaryngologists, dermatologists, and pediatricians. A more careful study of cases of epistaxis and of those complaining of various forms of telangiectases and angiomatous lesions of the skin and mucous membranes will bring to light additional cases of this disease entity.

(4) Cases of *familial* hematuria, hemorrhagic nephritis, hemoptysis, "gastrostaxis", intestinal and gastric bleeding, and some of the so-called essential idiopathic hemorrhages, are probably different forms of this disease.

(5) Reports of cases of familial epistaxis, with and without skin and mucous membrane (vascular) lesions, are included in this paper.

During the past 21 years I have met with 3 families in whom epistaxis occurred repeatedly and profusely. The first family (W.) was a typical instance of multiple hemorrhagic hereditary telangiectasia with familial epistaxis; 11 members of this family, were so affected. This family was reported by me in 1921 (*Arch. Int. Med.*).

Recently one of the patients was treated in the Atlantic City Hospital. In 1918, at the age of 42, she had a "stroke", due to bleeding from a cerebral telangiectatic lesion. Blood Wassermann test was negative. Renal function tests, blood chemistry, blood platelets, coagulation and bleeding time, and blood pres-

sure, at that time, were normal. There was no evidence of embolism, hemophilia, purpura, arteriosclerosis, hypertension, endarteritis obliterans, syphilis, uremia, or vascular crises. During her recent stay (April 1930) in the Atlantic City Hospital, in the service of Dr. Barbash, her condition was very poor, and blood transfusion was necessary. Laboratory studies, made at the hospital, showed as follows: April 3, 1930, R. B. C., 1,410,000; W. B. C., 12,750; hemoglobin, 35%; color index, 1.2 plus; polys., 89%; s. lym., 9%; l. lym., 1%; baso., 1%. Large amount anisocytosis, macrocytes predominate; slight poikilocytosis; marked achromia and polychromasia.

April 7, 1930, after transfusion, R. B. C., 1,910,000; W. B. C., 22,750; hemoglobin, 35%; color index, 0.9 plus; polys., 85%; s. lym., 13%; baso., 1%; mono., 1%. Slight poikilocytosis; marked anisocytosis; macrocytes predominate; marked achromia and polychromasia; occasional nucleated red cell.

April 15, 1930, W. B. C., 12,500; hemoglobin, 30%; color index, 0.7 plus; R. B. C., 1,690,000.

April 16, 1930, R. B. C., 2,010,000; W. B. C., 8,300; hemoglobin, 20%; color index, 0.5.

April 7, 1930, reticulocyte count 1.2%; Wassermann and Kahn negative. Coagulation time, 5 minutes; icterus index, 2.

April 15, 1930, platelet count, 66,000. April 16, 1930, percentage of banded W. B. C., 16%; blood calcium, 8.4 mgm. %; fragility test, minimal hemolysis, 0.40%; maximal, 0.34%.

#### REPORT OF AUTHOR'S CASES

##### First Family (1918-1921)

*Case 1.* Mrs. R. W., aged 42 years, white, married, has had severe persistent and recurring attacks of epistaxis since childhood. She has 2 daughters and 2 sons. One daughter, aged 20 years, has bled from early childhood. The other daughter, aged 11 years, has bled from the nose nearly all her life. The patient has telangiectatic lesions on the nose, nasal septum, lips, tongue, chin and cheek. There are a few lesions on the left side of the neck, and 1 on the middle finger of the left hand. None are seen on the thighs and



legs. The larger spots on the tip of the tongue have bled on several occasions. Bleeding from lower lip occurred once. Sometimes the hemorrhages from the nose are very profuse and uncontrollable. The patient received ferrous carbonate, sodium arsenate, calcium lactate and calcium chloride at various times. She also used thyroid and lutein for a brief period. Secondary anemia is present. Her eldest daughter has a few spots on the tongue, 1 over the right clavicle and some on the forearms. The younger daughter has none on the face or body, and only 2 very small ones are seen on the tongue. The patient's mother,



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Osler's Paper: Quarterly Journal of Medicine, 1907.

who is dead, also had recurring attacks of epistaxis and red spots. Three sisters are married; 2 have nosebleed; 1 sister, 34 years of age, bleeds profusely from the nose.

Her 4 children, J. H., 13; A. H., 11; M. H., 6, and I. H., 3; all suffer from epistaxis. Another sister, A. L., aged 32, bleeds from the nose. Her son, M. L., aged 8, does not bleed. A third sister, Mrs. M. C., aged 30, and 2 children, J. C., aged 10 and E. C., aged 5, apparently do not bleed.

Mrs. R. W. (the oldest daughter) had a "stroke" and hemiplegia January 20, 1918, after a little giddy spell. This attack was due to defects in the small vessels, like those occurring in other parts of the body, or a peri-

pheral sclerosis. Blood Wassermann tests were negative on several occasions. Blood chemical tests showed urea nitrogen 18 mg. in 100 c.c. blood; nonprotein nitrogen, 35 mg.; creatinin, 2.20 mg.

*Urine.* Jan. 26, 1918, trace of albumin; sugar less than 0.1%; chlorides, 0.5%; specific gravity, 1.005; granular and hyalin casts; flat, round and caudate epithelial cells; urea, 1%; acid.

March 11, 1919: Albumin present; urea, 0.5%; amorphous urates present; total solids, 16.3 gm.; faintly acid; specific gravity, 1.009; no casts; no sugar.

July 24. Acid; specific gravity, 1.015; no acetone; no diacetic acid; slight excess of indican 15 times normal; urea, 0.6%; no diazo reaction; slight excess of urochrome; no casts and no cylindroids; many red blood cells; many renal epithelial cells; large number of leukocytes (pus); 35 oz. urine voided in 12 hours.

Eyes: April 30, 1919. Posterior polar cataracts in both eyes.

Blood: Coagulation and bleeding time normal. Feb. 15, 1918. Erythrocytes, 3,980,000; leukocytes, 12,600; hemoglobin, 61%. Differential count: polymorphonuclears, 64%; transitionals, 2%; eosinophils, 3%; mast cells, 1%. July 24, 1919. Erythrocytes, 300,000; leukocytes, 14,600; hemoglobin, 68%; polymorphonuclears, 60%; large mononuclears, 12%; small mononuclears, 24%; transitionals, 2%; eosinophils, 2%.

The phenolsulphonephthalein renal function test was practically normal. The blood pressure varied during the past 3 years between 128 systolic and 90 diastolic, and 110 systolic and 80 diastolic.

*Comment.* At the time she had the stroke it was difficult to decide as to the cause. One could not easily differentiate between embolism, thrombosis and hemorrhage. There was no evident source of an embolus. A faint murmur could be heard over the heart, and at times it was faintly audible at the apex, but it could be attributed to the anemia. Shortly after the cerebral hemorrhage, the systolic blood pressure was 140; however, at no time during the past 3 years has it been higher than the normal average, often below.

She complained of a heavy feeling and numbness in the limbs, and "heaviness with giddy or dizzy feeling in the head". She had crying spells occasionally, worrying over her condition. She was seen by Dr. O. H. Perry Pepper at my request, who reported also that her clotting and bleeding time was normal.

There is no history of hemophilia in the family and none of the family bleed excessively from cuts. One son, A. W., aged 12 years, has several small telangiectases, and a large pale reddish nevus on the back of the left shoulder and 1 telangiectatic lesion below the right lower eyelid. He does not bleed from the nose. The eldest son, L. W., aged 23 years, apparently has neither epistaxis nor many telangiectases. There are a few over the scapular regions (supraspinous), and 1 lesion about 4 in. below and to the left of the left nipple.

At the time of the "stroke", and since, the patient, Mrs. R. W., has been seen by A. E. Roussel, F. X. Dercum, Charles Potts, W. G. Spiller, A. Gordon, of Philadelphia; T. D. Taggart, of Atlantic City; S. S. Butler, of Camden, and others, during the past 3 years; however, none of them made the diagnosis of hereditary telangiectasia with recurring hemorrhages, and did not associate the nosebleed and the cerebral complications with the hereditary weakness of the vascular system. Dr. Pepper agreed with me in my diagnosis.

*Case 2.* Mrs. Anna L., aged 32 years; married 7 years, had one miscarriage at 6 months, and 1 premature birth at 8 months, the child living only 24 hours. Her husband had a positive Wassermann test. The patient had a positive Wassermann 9 years ago. She has 1 boy, M. L., aged 7 years, living and well, who does not bleed from the nose. The patient has had nosebleed since early childhood; very frequent; bleeding stops of itself. Had influenza and pneumonia and measles. She bleeds very profusely from the left nostril. Her hands are cold, and she gets short of breath on exertion. Occasionally, she bleeds from hemorrhoids. She has 7 or 8 small spots over the back, on the shoulders, 2 small spots back of ears, several on the left side (anteriorly) of septum of nose and 1 or 2 on right side of septum. There are a few

radiating dilated capillaries around the alae of the nose. She also has clubbed fingers; these are cyanosed and cold; the lips are cyanosed and get "blue" very often. Blood pressure: systolic, 95; diastolic, 70. No cardiac murmurs were heard at time of the examination but the heart sounds were not of good quality; they were weak and muffled. She is a sister to the above patient (Case 1) Mrs. R. W., and to Mrs. E. H. (Case 3). Numerous Wassermann tests have been negative, following specific treatment taken up to a few years ago.

*Case 3.* Mrs. Eliz. H., aged 35 years, has 4 children. She had 1 miscarriage. One infant, aged 1 month, died of whooping-cough. She was operated on 4 years ago for ruptured gastric ulcer with intestinal obstruction. She has been bleeding from the nose almost daily since childhood. She says her mother bled "terribly" from the nose for a great many years, and she thinks her death was due to these severe nasal hemorrhages. She has a pin-point lesion above the right eyebrow, 3 or 4 spots on the right cheek over the malar bone, 1 pin-point lesion on the left cheek 1 in. to left of the outer angle of the left eye; 3 or 4 lesions on right half of the lower lip; 1 spot on the under surface of the upper lip; 1 on upper gum; 1 spot on neck at base (right side). She gets attacks of nosebleeding even during her sleep.

*Case 4.* Marvin H., aged 5 years, was always well, except for severe nasal hemorrhages. He has had nosebleed daily, and during sleep, since 2 years of age. He has 1 spot on left cheek, 1 in. below outer angle of left eye, and 1 on right cheek, 1 in. below and in front of right ear. Several dilated capillaries are noted on right side of septum of nose. He had measles. Mother says boy "bleeds in streams from nose" daily, which stops itself after bleeding for 5 or 6 minutes. While the hemorrhages have been severe and prolonged; there is only a comparatively mild secondary anemia. Sometimes washing the face, or using a handkerchief, or other very slight trauma is sufficient to bring on an attack of epistaxis.

Blood examination, Oct. 11, 1920: Hemoglobin, 70%; erythrocytes, 2,900,000; leukocytes, 8000; polymorphonuclears, 51%; small



lymphocytes, 45%; large mononuclears, 3%; eosinophils, 1%. Marked poikilocytosis. Blood Wassermann negative.

*Cases 5 and 6.* Aaron H., aged 11 years, and Jeannette H., aged 13 years, the children of E. H.; have bled very profusely from the nose since 2 years of age. They have "spots".

Blood examination, Oct. 11, 1920. Jeannette: Hemoglobin, 75%; erythrocytes, 3,350,000; leukocytes, 7400; polymorphonuclears, 72%; small mononuclears, 25%; large mononuclears, 2%; eosinophils, 1%. Some anisocytosis and poikilocytosis. Blood Wassermann negative. Aaron: Hemoglobin, 80%; erythrocytes, 3,250,000; leukocytes, 11,000; polymorphonuclears, 61%; small mononuclears, 36%; large mononuclears, 2%; eosinophils, 1%. Some poikilocytosis and anisocytosis. Blood Wassermann negative.

	<i>Boggs</i>	<i>Test Tube</i>
Marvin H.	5 min.	6 min.
Jeanette H.	6 min.	7 min.
Aaron H.	5 min.	4 min.

## SECOND FAMILY (1922)

(1) Mr. C., aged 33 years, white, adult, male. Autoparts mechanist. Past history negative, except that he has had frequent attacks of nose bleed for many years. In the past 3 or 4 years he has been complaining of severe headaches, particularly a left hemi-crania. He is married, has 4 children, 2 boys and 2 girls. His wife has not had any miscarriages. Venereal disease denied. One son and 1 daughter have had repeated attacks of nosebleed a number of years. General examination negative. The x-ray findings are as follows: Peri-apical abscess at the root of the last upper left molar; should be extracted. An incipient abscess at the root of the last lower left molar; this tooth, I believe, can be saved by early treatment. Sinuses: distinct clouding of the left antrum and right frontal due to presence of a fluid exudate or pus. The other accessory sinuses are normal.

Nose and throat examination showed free discharge of a mucopurulent nature from the left nostril and a degenerated middle turbinate of a colloidal character with obstruction to free drainage from the ethmoid and

frontal sinuses. There is distinct evidence of a frontal sinusitis and disease of the left antrum of Highmore.

(2) Dorothea C., aged 8 years. White girl, daughter of the above patient. Has had measles, chicken-pox and whooping-cough. Enlarged tonsils and adenoids. General examination negative. Has had repeated attacks of epistaxis; more often than her little brother. On examination 37 small brownish spots were found scattered over the trunk, neck and legs. One small telangiectatic spot about 2 in. below the right ear on the side of the neck and the left ear. Numerous very fine and dilated capillaries (arborescent and spider-like) over both cheeks. A few dilated capillaries are seen over the left nasal ala. One dilated capillary visible over the sternal end of the right clavicle and 1 over the right shoulder. There are some visible capillaries over the space between the left scapular spine and vertebrae.

(3) Harry C., aged 6 years. White boy, brother to the above patient. Has had measles, chicken-pox, grippe, and whooping-cough. Has attacks of hemorrhage from the nose; not very frequent of late. General examination negative. Has a pale pink nevus on the back of the neck,  $2 \times 1\frac{1}{2}$  in. and another "birth-mark" over the middle of the back  $1\frac{1}{4} \times \frac{3}{4}$  in. He has 28 brownish spots scattered over the body, resembling dark pigmented freckles. There is visible one area of dilated capillaries over the left cheek.

The father had several telangiectatic lesions, 1 or 2 on the neck and 35 or 40 dark pigmented spots, dark brown in color, scattered over the neck, trunk and arms. His tonsils were removed about 8 months ago.

## THIRD FAMILY (1929)

Mr. H., aged 29. Suffering from migraine and headaches for past 15 years. Had diphtheria, typhoid fever, pneumonia, 3 attacks of acute articular rheumatism. Now has occasional pains in the joints. Had nosebleed frequently and nearly bled to death following tonsillectomy. Is "drowsy" and "fatigued" and cannot concentrate. Mother has diabetes. Father and 2 brothers affected by nosebleed. Blood Wassermann tests were negative. Urin-

alysis negative. Bleeding time,  $2\frac{1}{2}$  minutes. Clotting time, 11 minutes (hypocalcemia). Blood calcium, 7.9 mgm. per 100 c.c. blood. Blood sugar, 90 mgm. per 100 c.c. blood.

Blood count: R. B. C., 4,390,000; platelets, 290,000; W. B. C., 10,000; polys., 59%; small lymphs, 39%.

Radiograph of sinuses showed clouding of left antrum. Sella turcica, normal. Teeth negative.

Eye examination, low amount of far-sighted astigmatism. Basal metabolism minus 25%.

Removal of the tonsil stump, cleaning the antrum, the administration of thyroid extract, calcium, parathormone, and ultraviolet ray therapy brought about rapid improvement. Blood calcium rose to 11 mgm. Blood uric acid, 3.8 mgm. Creatinin, 1.4 mgm. Basal metabolism became normal. One brother, aged 23 years, bled severely after tonsillectomy. Another brother, aged 25 years, bled profusely after tonsillectomy (1924); followed by pneumonia. Another brother, aged 42 years, used to bleed from the nose. His 3 sons do not bleed. The father, aged 68 years, had severe nosebleed when younger. One sister and 1 brother do not have nosebleed.

These instances of familial epistaxis resemble the type of cases reported by Giffin, of the Mayo Clinic, in the American Journal of Medical Sciences, 1927.

### DIAGNOSIS

The differential diagnosis must be made from "pseudohemophilia," hypertensive epistaxis, purpura hemorrhagica, hemophilia, pernicious anemia, tuberculosis, deficiency disease, or "hemorrhagic diathesis". Blood platelets, bleeding and clotting time are usually normal. Men and women are affected, and both sexes may transmit the condition.

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Acknowledgment is made of the privilege to use the illustrations—by permission of Archives of Internal Medicine (Chicago) and Quarterly Journal of Medicine (Oxford, Eng.).

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Hanes (1909) defines this clinical entity as an hereditary affection manifesting itself in localized dilatations of capillaries and venules, forming distinct groups or telangiectases which occur especially upon the skin of the face, nasal and buccal mucous membranes and give rise to profuse hemorrhage either spontaneously or as the result of slight trauma.

### DISCUSSION

*Dr. Matthew S. Ersner (Philadelphia):* I wish to congratulate Dr. Goldstein upon the splendid manner in which he presented his paper. The bibliography and analysis will remain as an accepted record for some time to come; I feel that he has left no stone unturned for he has covered the subject most thoroughly.

Epistaxis, commonly known as "nosebleed", occupies an important place in the practice of rhinology. The average individual who loses blood from any source, irrespective from where it comes, loses his general sense of proportion, becomes frightened, and so annoys himself, his family and the attending physician. When one stops to consider that the most precious of life's fluids is pouring forth and leaves in its path a pale, asthenic, anemic and an almost helpless individual, one realizes that "blood is blood" in any language and we must deal with epistaxis from a general as well as from a local standpoint.

Hereditary hemorrhagic telangiectasia may be defined as an hereditary abnormality which upon endonasal examination reveals localized dilatations of capillaries and venules. These telangiectatic areas can also be found in other parts of the body. The most prominent bleeding points in the nasal region are the Kesselbach area, middle of the septum, near the root of the turbinate and floor of the posterior portion of the nose. The important blood vessels that we encounter in these areas are the internal sphenopalatine and the superior coronary arteries.

Upon careful perusal of history, one will learn



that this condition occurs both in the male and female and is hereditarily transmitted both from the maternal and paternal sides. In some cases, however, it is difficult to prove that heredity follows the Mendelian law.

The 3 cases which I have in mind are of hereditary origin. The first, a male, was transmitted through the mother; the second, a female, through the father; the third case represents a close intermarriage of blood relations, the father having a history of gastric bleeding and the mother of nasal bleeding. The question of atavism, therefore, seems positive at least from these cases which I am about to quote.

*Case 1.* D. G., male, aged 6. In 1918 patient was first examined by me for a nasal hemorrhage. His chief complaint was profuse recurrent nasal bleeding which would occur upon slightest provocation or without any apparent cause. Family history revealed that his mother and sister were the bleeders in the family. As he grew older the epistaxis of the nose became less frequent. Although, it has been necessary for him to remain under my care for treatment at different times.

*Case 2.* S. M., female, aged 20, came under my observation in 1924 for recurrent nasal bleeding. Endonasal examination revealed a septal spur and dilated blood vessels. These would bleed excessively at different intervals. From the family history we learned that the father had gastric hemorrhages. His Wassermann and blood picture were negative. He died at the age of 40 from hemiplegia, probably due to a telangiectasia of the lenticular artery. About 4 months ago I again was called to see the patient who had another attack of epistaxis.

*Case 3.* M. B., male, aged 5. From the family history we learned that the father and mother were closely related, that the father had gastric hemorrhages and that an exploratory abdominal operation was performed but there was no abatement of the symptoms. The mother gives us a history of recurrent nasal bleeding and informed us that at the time of delivery she almost bled to death. Eight days after delivery, the infant was circumcised, and profuse hemorrhage followed the procedure. The child at the age of 5 was brought to me for tonsillectomy and because of the history of familial hemorrhage all precautions were taken. The blood coagulation, bleeding time, blood platelets and complete red and white count were taken and were found to be normal. As a further precaution, we administered calcium lactate by mouth and thromboplastin and parathormone hypodermically. Irrespective of all these precautions, a severe postoperative hemorrhage occurred which necessitated a 10 day hospitalization for the child. At the present time she is 11 years old and frequently gets nasal hemorrhage.

*Dr. Henry C. Barkhorn* (Newark): It is obvious that Dr. Goldstein is a "professor" on this subject and that it is hopeless for me to discuss even the bibliography. We have all seen telangiectasia with nosebleed. We have all seen families who said they were familial bleeders. The important thing to emphasize in this paper, and undoubtedly it is in the context, is that this is not related to hemophilia. It is not handed down through the female, nor are the blood changes of hemophilia present, but it occurs with these nevi which Cushing, for instance, has devoted a whole section in his book on intracranial vascular tumors—to the coincidence of nevi of the skin and nevi of the dura and mucous membranes. It occurs, as the doctor says, in protein locations. We have found that in handling these cases the best proposition perhaps was to

infiltrate with novocain under the nevus and then to cook it with the Bovi apparatus, or some apparatus, of that type, rather than to cauterize it with the actual cautery. The cooking current takes care of it without hemorrhagic manifestations; with the cautery you just go from one mess into a worse one and get more and more bleeding.

One must remember that if the bleeding comes from the middle turbinate region it comes from the anterior ethmoidal, which is a branch of the internal carotid, not the external, and you have to tie the internal carotid artery. If it comes from the septum it is from the external carotid and tying the external carotid will be adequate. This is for the dangerous cases.

I think it is very gratifying for this section to have had a real piece of research of this sort brought to our attention and to have it published in the Journal under the auspices of this section. It is most unusual, it is different, it is something that leads us to think, and it is something I am sure that will make all of us go into the history of the next patient who says, "Oh, yes, I used to bleed also", and see if we can find any hereditary connection and any nevi anywhere on the body.

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## MEDICOLEGAL ASPECTS OF DISABILITY IN INDUSTRIAL LEAD POISONING

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The most difficult and perplexing problem in connection with lead poisoning is the question of prognosis and disability. A careful search of general literature and text-books, both old and new, fails to disclose definite conclusions as to the amount and character of disability following industrial lead intoxication. For this reason I include no bibliography and confine my conclusions solely to actual cases that have come under my observation and study during the last few years, including not only those whose cases are pending before the compensation bureau and who suffer from an additional morbid psychic state, but also those whose claims have been adjudicated. It is the latter, who may gain no further benefits by their complaints, whose cases have been acted upon and "finally" adjudicated, that can serve as a criterion and, by way of example, demonstrate what disability and physical incapacity may result from lead poisoning.

That lead poisoning will occur among industrial workers no matter what preventive

measures are adopted or precautions taken goes without saying. Under favorable circumstances, with most modern safeguards the incidence of lead poisoning is greatly reduced and the disability in existing cases minimized. However, there is danger of over-confidence in safeguards. The attending physician of a recently built storage battery plant, with all the modern devices that safety engineering can provide, assured me that no cases of lead poisoning could possibly occur in their plant. There are hoods, gloves, respirators, ventilators, shower-baths and even a change of linen. The workers are carefully scrutinized, foreigners are generally rejected, physical examination made at frequent intervals, and even ordinary illnesses are treated by the plant physician at the company's expense, in order to detect and arrest incipient cases. Yet, after a comparatively short time, a great many men were taken acutely ill and have since been undergoing treatment for lead poisoning. The explanation lies in the very nature of the industry and its inherent hazards.

Industrial lead poisoning is a very costly affair. The annual wage loss attributable to this disease amounts to millions of dollars and the annual total loss to about 5 or 6 times that amount. In this are included the cost of medical care, the over-head cost in connection with payment of claims, and the important indirect cost of loss of production. Formerly, the affected workman footed the entire bill because the disease was not compensable. At present, lead poisoning has been entered upon the statutes of, I think, 12 states but the worker still pays the bill in pain and suffering, impaired productive power, workless and wageless weeks and years, and consequent lowered standard of living. It has been estimated that the injured workman assumes from three-fourths to four-fifths of the financial loss attending his incapacity even under the most liberal compensation laws.

Industry has already learned that it is "good business" to prevent accidents, but it has not learned that it pays equally to prevent occupational disease. However, among the more enlightened of industries, where intensive and sustained efforts for prevention of lead poisoning are maintained, it is consider-

ed more than sound business to put up the money for elimination of lead poisoning from modern industry, or at least to minimize, if it cannot entirely abolish, the disability resulting from the insidious poisoning. The experience of a few of these plants where a fair degree of safety has been obtained points to a decided economic advantage, for safe working conditions bring about efficiency and increased production, reduce over-head, improve labor relations and place rival industries at a competitive disadvantage.

It is rather interesting, though regretful, to observe the methods employed by a goodly portion of the lead industry to avoid payment of compensation for lead poisoning instead of preventing it and curing when it does occur. A New Jersey plant where safety measures were few and the hazard great employed a system of signing up each employee as an independent contractor at the time of application for employment. Another plant would discharge grumbling Portuguese and employ satisfied Negroes. A third would reject the ungrateful Negroes and engage the meek, but thankful Portuguese. It so happened that there was a mutual exchange of poisoned employees. I have also observed some men being ill with lead poisoning and who were given certificates for grippe, influenza and gastritis. However, industry as a whole is willing to cooperate and eradicate lead poisoning from its midst provided it is given the proper incentive and guidance.

That a true case of lead intoxication usually leaves an indelible imprint upon the human system and causes permanent pathologic changes no one disputes. Nor is it denied that poisoning by the same metal may terminate fatally. It is, furthermore, generally conceded that a mild case may produce some temporary discomfort without permanent pathology. Testifying before the Newark, New Jersey, Compensation Bureau, Dr. Joseph C. Aub stated that encephalopathy and peripheral nerve changes may be permanent in nature, but he had no evidence to prove or disprove other organic changes. The following week I spoke to Dr. E. R. Hayhurst who assured me that chronic lead poisoning invariably produces nephritic changes and may result in a con-



tracted kidney. Subsequently, at a symposium on occupational diseases, Dr. Harrison S. Martland stated that, in treating cancer with colloidal lead, patients were all cured of their cancer but died of lead poisoning. Professor Chayes and Dr. Levin of the Berlin-Lankowitz Hospital made a study of 1500 cases diagnosed as lead poisoning and came to the conclusion that "organic changes in the blood, the kidneys, nervous system, intestinal canal and liver can rightfully be attributed to the action of lead".

The conditions enumerated in the preceding paragraph illustrate some of the factors entering into the computation of disability, the true measure of which is the amount of *impaired function* and physical incapacity remaining after all acute manifestations have disappeared. It has been established that in true cases of lead intoxication the lead is stored in the long bones of the body. After an apparent recovery the accumulated lead is subject to sudden liberation and mobilization into the circulation by so slight an agency as the common cold, change in diet, or ordinary fatigue which, while having no effect on the every day worker, is sufficient to disturb the acid-base equilibrium and reactivate the lead poisoning long after cessation of exposure. This condition lessens the worker's earning capacity, increases the number of workless days per year, reduces the period of "work expectancy" and with other sequels contributes to a shorter span of life.

*Temporary Disability.* In lead poisoning this is the period during which the affected individual is incapacitated from any work on account of acute manifestations of the disease. The most distressing symptoms at this time are the severe colic, intense headache, and general asthenia. Duration of this period is extremely variable, depending upon many factors, such as age and sex of individual, length of exposure, compound exposed to and, above all, the susceptibility and idiosyncrasy of the individual. This period of disability varies greatly with the particular systems or organs involved in the exposed individual. If the poison attacks the brain or the nerves and their endings, the period is longest, while in cases with predominating cardiovascular disturbance the period is shorter, and it is still further re-

duced if the symptoms are confined to the gastro-intestinal tract. Generally speaking, the period of temporary disability in industrial lead poisoning varies from 2 or 3 weeks to several months, and considerably longer in cases of encephalopathy.

*Permanent Disability.* This is the residual damage or permanent pathology left after the individual is removed from further exposure, and medical and physical measures instituted, and sufficient time has elapsed to allow the ordinary consequences of the disease to disappear by medication and elimination. Generally speaking, this residual damage is greatest in the cerebrospinal type of cases, because of the nature of brain tissue. Injury by the lead directly, or through the damaged blood vessels indirectly, is permanent in character because damaged brain tissue does not regenerate. This is the most distressing form and may be characterized by headache, tremors, neurasthenia, hallucinations, convulsions or epileptiform seizures, or even insanity. Similarly, the neuromuscular type exhibits muscular weakness, atrophy and even muscle group paralysis. The permanent pathology in the cardiovascular group is referred to the secondary anemia and to local changes in the organs supplied by the sclerotic vessels. The gastro-intestinal form is milder in its permanent effects, the individual suffering at most from a persistent constipation and recurrent colic.

To determine the permanency of the pathology and its resulting disability I have followed a great many cases from inception until the present date. The following data are based on a study of over 200 cases of industrial lead poisoning that have come under my observation during the last few years. No cases were included in the series unless, at the onset of the disease, they presented the following cardinal signs of lead intoxication: History of exposure to lead, colic or epigastric distress, stippling of the red blood cells, and usually presence of lead in the urine. It is apparent that the deductions as to permanency of the pathology would not apply to all cases of alleged lead poisoning because, as a rule, those not presenting the cardinal signs were regarded as temporary in nature and excluded from the series. About 50% of these cases

have cleared up and left no appreciable disability, or have not reached the stage where permanency could be established. Due to lack of space and time, the details of 12 cases and a résumé of about 85 others constitute the basis upon which the conclusions are reached. These have been under my observation from 1 to 4½ years.

*Case 1.* February 22, 1929. J. S., male, white, single, 31, Portuguese, lead furnace worker, working 7 days a week. Cramps in stomach, vomiting spells, dizziness, headache, weakness in hands and feet.

Blood: Hb., 76%; R. B. C., 4,000,000; W. B. C., 6500; 85 stippled cells per 100 leukocytes; moderate poikilocytosis; anisocytosis and polychromophilia. Urine: Sp. Gr. 1.013; occasional hyaline cast; lead present.

February 30, 1930. Persistent constipation; occasional cramps; headaches; dizziness; loss of sight; general weakness, particularly hands and feet; loss of memory.

Physical examination: Lead line on gums; blanched membranes; tenderness over epigastrium; pupils react but very sluggishly, right more than left; diminished knee jerks; masked facies; blepharospasm; triceps reflex diminished; retinal hemorrhages; arteriosclerosis; sclerotic vessels in retina.

*Case 2.* March 18, 1929. J. C., male, white, married, 33, Portuguese laborer, furnace worker in smelting plant. Cramps in stomach, vomiting, headache, dizziness and muscular pains.

Blood: Hb., 58%; R. B. C., 2,900,000; W. B. C., 6800; stipples 200 per 100 cells; poikilocytosis; anisocytosis; and polychromophilia. Urine: Lead present; trace of albumin; hyaline casts numerous; occasional granular casts.

July 21, 1930. Cramps, persistent constipation, fatigue on moderate exertion, occasional attack of colic, recurrent headaches and impaired vision.

Physical examination: Remains of blue line on upper gum; dull facial expression; pupils widely dilated; tremor of tongue and extended fingers. Blood shows a mild secondary anemia. Urine: Albumin, hyaline and granular casts; negative for lead.

*Case 3.* December 6, 1928. P. McR., male,

colored, married, 33, American laborer, cleaning tanks where colors and paints are mixed, worked 9 hr. a day, 5½ days a week. While working, was taken suddenly ill with severe cramps, vomiting, headache, dizziness, and general weakness.

December 22, 1928. Blood: A few stippled cells. Wassermann negative.

January 12, 1929. Urine: Faint trace of albumin; many hyaline and granular casts; lead present. Blood: Hb., 45%; R. B. C., 3,250,000; W. B. C., 5250.

April 9, 1929. Blood: Stipples—36 per 100 cells; marked poikilocytosis; moderate anisocytosis and polychromophilia. Urine: Strongly positive.

September 6, 1929. Weakness, occasional colic, pains in joints and back, general pallor. Urine: Lead present; hyaline and granular casts. Blood: Hb., 68%; R. B. C., 3,600,000; W. B. C., 4200; occasional stipples.

Physical examination: Arcus senilis; left disc pale; pupils react; tachycardia; diminished knee-jerks; hypesthesia of lower extremities.

June 30, 1930. Cramps, pain in back, weakness of muscles, particularly wrists, persistent constipation, easily fatigued.

*Case 4.* March 1929. J. R., male, single, white, 28, Portuguese laborer, working on lead furnace in smelting plant 7 days a week. Severe cramps, vomiting spells, dizziness, weakness, constipation and severe pains in both legs. Blood: Hb., 78%; R. B. C., 4,100,000; W. B. C., 7400; 40 stipples; polychromophilia. Urine: Lead present; occasional hyaline cast; Wassermann negative.

January 24, 1930. Headache, dizziness, vertigo, diplopia, defective memory, weakness of arms and legs, particularly left arm.

Physical examination: Irregular, intermittent heart; enlarged liver; normal reflexes and gait; very slight tremor of fingers; slight hypalgesia; hypesthesia; good general muscular response to electric reactions.

*Case 5.* January 1929. M. N., male, white, married, Portuguese, 41, laborer working on lead furnace 11 hours a day and 7 days a week. Pains in stomach, very weak and tired in legs, vomiting, "funny taste in mouth", "headache that makes everything turn around when



standing up". Blood: Hb., 70%; R.B.C., 4,100,000; W. B. C., 8000; marked polychromophilia; slight poikilocytosis; anisocytosis; 18 stippled cells. Urine: Negative for lead.

January 14, 1930. Headache, dizziness, weakness of arms and legs, poor vision in one eye, loss of weight.

Physical examination: Blue line on gingival margin; cyanosis of hands and feet; general tremulousness and general increase in deep reflexes; electric reactions show the upper extremities to react well while the lower, especially the right leg, does not react so well; eye-grounds reveal some signs of optic atrophy which may be due to the lead poisoning.

*Case 6.* March 23, 1929. A. M., male, white, married, 38, Portuguese, lead furnace man in smelting concern, worked 7 days per week. Cramps in stomach, loss of appetite, dizziness, headache, vomiting, dry throat, generalized weakness and persistent constipation.

March 20, 1929. Blood: Numerous stippled cells.

March 26, 1929. Blood: Hb., 60%; R. B. C., 3,000,000; W. B. C., 5200; 100 stipples; poikilocytosis; anisocytosis, and polychromophilia. Urine: Positive for lead.

December 29, 1930. Loss of vision which is periodic in nature, nervousness, weakness of extremities, difficulty of speech and constipation.

Physical examination: Waxy yellow skin; restless eyes; fine tremor of extended fingers and protruding tongue; dyspnea; abdominal reflexes equal and active; right ankle-jerk absent; hypalgesia and hypesthesia over all extremities; extensor weakness; eye-grounds reveal optic atrophy.

*Case 7.* December 1929. A. B., male, white, 35, Portuguese, married, lead furnace worker for 3 years, worked 7 days a week. Sudden attack of dizziness, weakness, pain in stomach and fell unconscious while at work. Blood: Secondary anemia and marked stippling.

Physical examination: Well developed individual; pale; sallow expression; gait steady; abdominal tenderness; exaggerated reflexes; extensor weakness.

January 1931. Constipation, headache and insomnia.

Physical examination: Well-nourished and

muscular; somewhat anemic; frightened facies; expression pinched; waxy skin; unsteady gait; general tremors; pupils slightly unequal, right larger than the left; discs pale; vessels over-filled and tortuous; thrombosed veins in center of right disc; all reflexes exaggerated tremendously. B. P. 142/80. Tuning fork, air conduction less on left side. Loss of tuning sensation. Marked tremor of tongue and extended fingers.

*Case 8.* October 15, 1929. A. D., male, white, 32, married, lead furnace tender, worked 7 days per week. Headache, dizziness, pain in abdomen, weakness in extremities, nausea, vomiting, impaired vision. Blood: Hb., 65%; R. B. C., 3,900,000; W. B. C., 6500; color index, 0.9; polynuclears, 57%; small lymphocytes, 33; large lymphocytes, 8; endothelial cells 2; 125 stippled cells per 100 leukocytes; R. B. C., achromatin; anisocytosis; poikilocytosis; and polychromophilia.

October 15, 1929. Physical examination: Pallor of skin and mucous membrane of mouth and conjunctiva; epigastric tenderness; extensor weakness.

January 1931. Physical examination: Pale; unsteady; atrophy of left arm; Romberg positive; exaggerated knee-jerk; practically no plantars; slight optic neuritis; retina pale (on both sides); vessels congested; hypesthesia of left side of chest and legs; general tremors; atonic facies; corneal anesthesia; epigastrium still tender.

*Case 9.* April 27, 1928. J. C., male, white, married, 36, Portuguese, previous occupation agricultural laborer, taking molten lead and copper from the furnace. Became ill in April 1928. Date of last exposure—April 27, 1929. Cramps, dizziness, nausea, vomiting, general weakness; subsequently faintness followed by unconsciousness. Blood: Hb., 83%; R. B. C., 4,600,000; W. B. C., 6800; 32 stipples, normal as to size and form. Urine: Negative, except for few blood cells. Wassermann negative.

November 2, 1929. Epileptiform seizures growing more frequent in duration and lasting longer. Had attacks on street and once in subway. Epigastric tenderness, tearing headaches and general weakness.

Physical examination: Pale waxy skin;

cadaverous mask-line facies; appears indifferent and phlegmatic; heart sounds below par; B. P., 115/90; slight involvement of the upper left chest, subcrepitant râles; sclerosis of retinal vessels; abdomen-epigastric tenderness and right rectus rigidity. Reflexes—in creased triceps, biceps, ulnar and radial; markedly increased knee and Achilles reflexes; left Babinski. Bilateral papillitis. Extremities cyanotic, skin dry—diaphoresis. Blood: Numerous stippled cells. Urine: Albumin, hyaline casts; R. B. C., and W. B. C.

*Case 10.* July 1929. A. F., male, white, 36, Portuguese, single, tap man in lead furnace, worked 7 days a week. Loss of appetite, muscle weakness, headaches, cramps, vomiting. Blood: Marked stippling. Hb., 43%. Urine: Positive for lead. Physical examination: Well developed; rather pale; waxy, pinched expression; tender over epigastrium.

May 31, 1930. Physical examination: Appears aged; hair gray; masked facies; slow and unsteady gait; cadaveric skin; pale conjunctiva; slight facial paralysis. Blood: Hb., 50%; R. B. C., 3,250,000; W. B. C., 5000; color index, 0.8 plus; polynuclears, 50%; lymphocytes, 48%; endothelial cells, 2%; 35 stippled cells per 100 leukocytes; red cells show anisocytosis; poikilocytosis and polychromophilia.

January 1931. Headache, dizziness, weakness, impaired vision, deafness in right ear, progressive constipation and facial paralysis, loss of weight, insomnia. Physical examination: Anemic; lacks initiative; pupils react to light and accommodation; slight nystagmus; eye-grounds distinctly blurred; retinal veins tortuous and engorged with a definite optic neuritis. Facial paralysis very marked. All reflexes sluggish except right knee which is exaggerated. Hands tremulous; station unsteady; speech defective.

*Case 11.* November 1928. P. R., male, white, single, 48, Ukrainian, grinder and weigher in color and pigment plant for 5 or 6 years. Working 11 hours a day and 7 days a week. Cramps in stomach, back and chest. itching over whole body, vomiting, dizziness, sweet and bitter taste in mouth, constipation and shaking. Blood: Hb., 87%; R. B. C., 4,400,000; W. B. C., 7000; no stippled cells or

poikilocytosis; normal as to size, form and staining. Urine: Negative for lead; albumin and casts present. Wassermann negative. Feces positive for lead.

February 1930. Physical examination: Masked facies; general and muscular development fair; heart and lungs negative; defective speech; persistent nystagmoid movements of the head; pupils react normally; generalized tremors; marked intention tremors; general weakness of extensors; sensory areas of anesthesia in upper extremities and hypesthesia in lower; mentally retarded; hyperemotional and too excited to answer simple questions.

This man is totally incapacitated for any kind of work although part of his pathology may possibly be attributed to a head injury he sustained about 15 years ago. However, he did not lose any time from work during the preceding years.

*Case 12.* February 1926. I. B., male, white, married, 54, American, painter for 15 years. General weakness, colic, dizziness, dropped to the ground while at work and unable to work. Blood: Large amount of stippling. Urine: Lead present.

April 1926. Began to feel lazy, had no ambition, lost appetite, was constipated, had peculiar nasty taste in mouth every morning, constantly increasing headaches, dizziness and nausea. Both wrists were losing strength so that he was unable to hold brush.

April 19, 1926. Felt sick at stomach, had sharp cramps, got red in the face, and had pains in arms and legs. Collapsed and taken to the hospital where he remained for 6 months.

January 2, 1929. Physical examination: Patient developed advanced encephalopathy. Nystagmoid movements of head; generalized tremors; paralysis of extensors of both forearms; weakness of extensors of legs; unable to do work of any kind.

January 22, 1931. Physical examination: Condition unchanged; double wrist drop; legs weak, tremors more pronounced; unable to do any work.

In addition to the 12 cases cited, about 90 others have been followed periodically and the findings recorded. While a series of 102 cases is far too small a number upon which to base



definite conclusions, nevertheless, the repeated clinical manifestations and objective findings as disclosed in the periodic examination clearly point toward definite pathology as shown in the following table:

The subjective and objective symptoms of this group in the order of their frequency and their percentages were as follows:

SUBJECTIVE	
Persistent headache .....	70%
Dizziness .....	60%
Obstinate constipation .....	52%
Muscle group weakness .....	48%
Premature fatigue .....	36%
Epigastric pains .....	35%
Visual disturbances* .....	33%
Arthralgia .....	32%
Shakes .....	32%
Insomnia .....	20%
Periodic vomiting .....	18%
Loss of weight .....	14%
OBJECTIVE	
Anemia .....	60%
Eye-ground changes .....	33%
Tremors .....	32%
Unsteady station .....	25%
Hypesthesia and hypalgesia .....	20%
Nephritis .....	18%
Arteriosclerosis (premature) .....	16%
Lead line .....	16%
Cardiac lesions .....	12%
Retinal hemorrhage .....	11%
Facial palsies .....	10%
Dyspnea .....	9%
Wrist and ankle drop .....	5%
Convulsions .....	2%

While the subjective symptoms may have been exaggerated wilfully or as a result of an anxiety neurosis, nevertheless, the physical signs, ophthalmoscopic findings and laboratory examinations, demonstrated the physiologic basis for their abstract complaints.

In reply to a questionnaire sent to the medical officers of 30 life insurance companies scattered throughout the United States and Canada we received the advice that a man who had suffered from industrial lead poisoning would not be issued ordinary life insurance and would be "rated" up for a sub-standard form of insurance. Practically none would issue health insurance or attach a disability clause to the policy. While this is not conclusive, it is rather significant, in view of the attitude of the insurance companies that base their opinions on past experience.

## OBSERVATIONS

(1) Wrist drop was comparatively rare, with the exception of the painter who used his wrist muscles more than the others.

(2) The blood picture is of diagnostic significance and is indicative of the intensity of the disease in the acute and subacute stages. It is of no import in the chronic stage since the most seriously affected of that group—those who are permanently and totally disabled—displayed a practically normal blood.

(3) Persistent headache, dizziness, constipation, general weakness, visual disturbance, muscle and joint pains, in their respective order, are the chief complaints of the patient suffering with chronic plumbism; the other symptoms are just as definite, but less frequent.

(4) Workers in different industries, where different compounds or processes are used, display different clinical pictures and blood findings. The white lead workers showed a persistently low hemoglobin; the smelters a low red blood cell count; and the lead battery workers an arthralgia and myalgia.

(5) Workers with chronic plumbism are ready victims for intercurrent diseases, particularly tuberculosis. Incised or lacerated wounds "fester" and the duration of the ordinary cold is out of proportion to its severity.

(6) Over-worked men have a longer period of temporary disability and are subject to most residual damage. The more seriously affected of the group were those who worked 7 days a week and 10-12 hours a day. Apparently in these individuals elimination did not keep pace with absorption and the accumulated balance resulted in permanent disability.

(7) The length of exposure was of no material significance. Some men with 2 or 3 weeks' exposure suffered from a more intense attack and were left with greater disability than those with long years of exposure.

## CONCLUSIONS

(1) A mild case of lead poisoning may leave no permanent disability.

(2) The gastro-intestinal type of lead poisoning is of a temporary nature and the resulting persistent constipation is not disabling in character.

(3) The cerebrospinal form of lead poisoning is the most distressing in its manifestations, most destructive in nature, most permanent in character and may result in total permanent disability.

(4) The kidneys usually show the most degenerative changes.

(5) Long hours and over-work are conducive to greater disability.

(6) Chronic lead poisoning sufferers have a lowered resistance, are poor risks for health insurance, and have a shorter life expectancy.

May I mention, in closing, that our follow-up work and examinations of this group, though by no means perfect, have revealed that these men have been suffering intensely and persistently. I could not escape the feeling, although I cannot produce the legal proof, that once a man suffers from a severe industrial lead intoxication he never completely recovers from it and carries the sequels to the end of his days.

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## DIFFERENTIAL DIAGNOSIS OF LEAD POISONING

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Of late years, during the development of industrial medicine and surgery as a specialty, much has been written concerning lead intoxication, and attention of the profession has been clearly drawn to consideration of this condition when facing indefinite complaints by workers employed in lead hazardous occupations. In fact, the emphasis has been so great that there exists a very definite danger of overlooking the fact that a man can be so employed, even show evidence of lead absorption, and yet his complaint may be pathologically due to some other, intercurrent condition. This danger is enhanced by the fact that often the symptoms of lead intoxication are manifold and indefinite, and may so easily be confused with chronic conditions the symptoms of which are similar. As lead intoxication is the diagnosis of least resistance, intercurrent conditions can easily be neglected,

and it requires an exceptional amount of zeal and diagnostic acumen to pursue investigation further, when a lead hazard employee complaining of indefinite symptoms, showing basophilic stippling and some anemia, presents himself for diagnosis. And yet, quite frequently, if sufficient time is allowed to elapse to allow his pathologic condition to become diagnostically definite, any one of a number of chronic diseases may establish its presence.

In order to discuss differential diagnosis more intelligently, I would like to enumerate briefly the salient signs, symptoms, and laboratory findings in lead intoxication.

*Clinical picture.* As a rule, the symptoms are rather indefinite and gradual in their onset. The patient first notices that his appetite is diminishing. There follows some sleeplessness, headache, constipation, easy fatigue, irritability, nervousness, inability to concentrate and, occasionally, indefinite abdominal pains and nausea. These symptoms might manifest themselves a few weeks after the beginning of exposure, and sometimes not for years, depending on individual susceptibility. As a rule, if a man works for 6 months in the presence of a lead hazard without any of the prodromal signs just described, his susceptibility is rather high, and with care he will not develop lead intoxication. As the condition advances, there appears a characteristic pallor. There is a uniformly grayish color of the face, like the appearance often noticed in miners, or people working constantly at night occupation where little exposure to sunlight is obtained. It is often surprising how slight is the loss of hemoglobin as compared with the pallor of the face. It is difficult to avoid being misled by Spaniards, Portuguese or other people whose color is normally grayish and pallid. There develops a very fine tremor, intentional in character, beginning around the ocular and buccal sphincter muscles, especially noticeable when the patient is requested to bare the upper gums or approximate the eyelashes without shutting the eyes entirely. Later, there is a tremor of the fingers and hands, demonstrable when the patient is requested to hold out the arms and hands straight and separate the fingers, and to main-



tain that position for a few minutes. Also there is a gradually increasing weakness of the tensor muscles of the fore-arm demonstrable by having the patient flex and extend the wrist against resistance measured by spring scales or weights. In far advanced cases, as is well known, there is a wrist-drop, and foot-drop. Meanwhile, loss of appetite is increasing; he will carry his lunch home untouched. Constipation; which only very large doses of cathartics will remedy, becomes severe. There will be indefinite colicky pains and marked fulness in the epigastrium; metallic taste is often complained of; headaches and insomnia increase; fleeting pains along the peripheral nerves and joints but no real arthritis or neuritis. In some cases, conjunctival jaundice is in evidence, and the well known Burtonian line, or lead line, develops. Sometimes there is a mental change; irritability, forgetfulness, nervousness. I need hardly mention lead colic, for it has been often described and well impressed on the clinician, except to say that it is usually a late symptom; but when present it clinches the diagnosis. In fact, lead colic is not present so frequently as general opinion would indicate. Encephalopathies occur, manifested by epileptiform seizures, convulsions, and even coma, but these are fortunately rare and late manifestations. Ocular disturbances also occur, ranging from paralysis of the external muscles to real optic atrophy. There are some symptoms mentioned in text-books which have never been proved to be due to lead, and which, clinically, I have never been able to accept as such; i.e., arteriosclerosis, hypertension, organic kidney changes, organic joint changes.

The symptoms above described may all co-exist or may be present at different times. In the majority of cases, some of these symptoms are strikingly in evidence, others negligibly. It is by a combination of symptoms and signs, and by their extent and correlation, that we are guided to a diagnosis.

*Laboratory findings.* The blood picture is very distinct. There is a diminution of hemoglobin, which is rarely lower than 65%; anisocytosis and poikilocytosis; diminution of the red cells, but rarely lower than 3,500,000; the white cell and differential counts are not

altered. Basophilic degeneration or *stippling* of the red blood cells is present to a varying degree. I have been in the habit of estimating these cells quantitatively in relation to 100 white blood cells, and less than 6 stippled cells is not considered pathologic. There exists considerable difference of opinion as to the prognostic value of the number of stippled cells present. I am convinced that the presence of stippled cells in the blood in excess of 6 to 100 leukocytes, when the primary anemias, leukemias, malaria and benzol poisoning can be excluded, is indicative of just one thing—absorption of lead into the system. Whether or not the lead thus absorbed is causing poisoning, stippled cells will not tell us. In a frank case of poisoning it will not tell either the severity or progress. Attaching any further significance to the presence or quantitative determination of stippled cells is the one great stumbling block of the differential diagnosis of lead poisoning. I have followed men who have shown consistently stippled cell counts, varying from 10 to 300, for years, who have not lost a day from work because of illness nor shown any other symptom of lead poisoning. Men can have severe cases of lead poisoning, and show very few stippled cells. The absence of stippled cells, on repeated examinations, is a distinct evidence of freedom of the system from lead; or to put it differently, no lead poisoning can be present if no stippled cells are found on repeated examination.

Presence of lead in the feces shows the entry of lead into the gastro-intestinal tract. Whether it has been swallowed and passed through, or reabsorbed from the blood stream, it is impossible to state. Presence of lead in the urine shows that lead has been absorbed and passed through the system. The presence of lead in either feces or urine or both simply shows absorption, not necessarily poisoning. Further symptoms and signs are required to diagnose poisoning, with these laboratory findings as corroborative evidence.

The diagnostic value of the lead line is in the same category as the laboratory findings. Its presence indicates lead in the system, but not necessarily poisoning. Its absence does not preclude lead poisoning. It must be noted,

in passing, that Arabs and Turks have natural bluish spots on their gums which must not be confused with a lead line.

Differential diagnosis must be discussed in relation to 3 distinct groups: (1) Frank cases where no unusual difficulties are present. (2) Frank cases where lead poisoning is claimed but the indications are clearly negative. (3) Borderline cases, where it is necessary to use extreme care to arrive at a diagnosis.

Group 1. Lead colic is relatively simple to differentiate, although there are a few conditions with which it might be confused. Appendicitis shows more localized pain, tenderness, and rigidity. In lead colic, the signs are referable to the upper abdomen, as a rule, and rigidity is generalized and intermittent. There is seldom more than 1° elevation in temperature in lead colic, and no leukocytosis. It is possible to have acute appendicitis in cases where stippled cells and lead line are present. Peptic ulcer about to perforate the serosa will give symptoms resembling lead colic; the onset of pain is more abrupt, and tenderness and rigidity are localized to the right side of the epigastrium, while in lead poisoning they are more generalized. Cholelithiasis, nephrolithiasis, tabetic crises, and kinks of the ureter, must also be considered, but they have characteristic signs and need no further discussion. Hypodermic injections of morphin sulphate in adequate doses will relieve these conditions, but are not so apt to relieve the pain of lead colic. Intravenous injection of calcium chloride or gluconate will relieve lead colic but will have no effect in the other conditions. Atypical cases of angina pectoris must also be considered, but the direction of the pain, being referred to the left shoulder and arm, the facies, the absence of abdominal rigidity, history of previous similar attacks and hypertension will clarify the diagnosis. Wrist-drop and foot-drop are easily diagnosed, but in some cases alcoholic neuritis, slowly developing polyomyelitis, and progressive muscular atrophy must be considered.

Group 2. Workers in factories where propaganda has been undertaken to prevent lead poisoning often come to the medical adviser with the home-made diagnosis of lead poisoning but with conditions which may be

anything from acute follicular tonsillitis to eczema. I mention these cases only to warn the clinician not to accept readily the diagnosis just because the patient has been exposed to a lead hazard.

Group 3. It is in cases where indefinite symptoms with no distinct physical signs are present that the greatest care must be exercised. Every case must be decided on its own individual merits and diagnosis arrived at by correlating the symptoms, by careful valuation of the significance of prominent symptoms present, by taking into consideration the suggestive help of less striking symptoms, and the corroborative evidence of the laboratory findings. As a rule, where gastro-intestinal symptoms are present, a lead line is evident, pallor is striking, constipation marked, and the blood picture is positive, the condition must be treated as lead intoxication until disproved.

Among conditions most closely resembling lead intoxication, chronic alcoholism is most frequent and must be seriously considered. It will produce the gastro-intestinal signs and symptoms, the tremors, headaches, insomnia, and nervous manifestations. It will cause peripheral neuritis, often blamed on lead. Chronic alcoholism predisposes to lead intoxication, and for that reason alcoholics should be removed from where lead hazard is present. When in doubt, consider the condition as alcoholic, secure thorough elimination, and the patient will be relieved; if not, the case should be considered positive for lead and treated accordingly. Alcohol and lead do not mix; alcoholics show signs of poisoning early and from relatively small amounts, and so they seldom develop bad cases of lead intoxication and can be deleaded promptly. Tuberculosis in its incipient stages may be easily mistaken for lead poisoning. The gastro-intestinal complaints, weakness, loss of appetite, debilitation and pallor are common to both conditions and very often radiographs, positive sputum, and temperature records are necessary before a definite diagnosis can be made. Syphilis, as the greatest imitator, has a rival in lead poisoning, which also can mimic a great many indefinite conditions. General paralysis will be ruled out by the positive Wassermann reaction; which reaction



in lead poisoning is always negative. Pernicious anemia, leukemias, and secondary anemias can be ruled out by the blood picture, although they might be combined with lead absorption.

*Malingering in lead poisoning.* No paper of this character would be complete, without some consideration of malingering. The majority of workmen exposed to lead for a long time will absorb a certain amount, varying according to individual susceptibility, the length and character of exposure, health of the individual and precautions exercised. This absorption might be temporary, recurrent, or permanent. It can be easily demonstrated by the lead line, stippled cells, and presence of lead in the feces and urine. Only a small percentage of workers will develop lead poisoning, if proper precautions and care are exercised. Practically any of these men can, however, claim the presence of lead poisoning if their laboratory findings are positive, and if they can enumerate enough subjective symptoms which no one can disprove or deny. If a lead line is present, they can strengthen their case accordingly. The motive for malingering is the money which the compensation court might award for temporary, partial or permanent disability. The immediate cause for malingering is either some grievance against the employer, a large award recently made to some friend, the persuasion of some lawyer's runner, or transfer to some other work which is disliked. It has been my experience that a good many men, discharged at any one time, will promptly find their way to the compensation court, being represented by the same lawyer, complaining of the same or similar symptoms, in spite of the fact that their employment and medical records are free of complaints, or noted absences from work because of illness. It is not easy to explain this occurrence on the basis of coincidence. The following instances may be of interest. In a certain lead plant 2 men were discharged because of acute alcoholism. On the same day one of the furnaces was shut down for repairs, and 2 men were discharged for lack of work. All 4 men filed claims for compensation, claiming permanent disability because of lead poisoning. In another instance, a man

filed claim for compensation because of a slowly developing hernia. The case was decided against him and he promptly changed his plea to partial permanent disability because of lead poisoning. All of these men had medical certificates to back their claims, the diagnosis in each case being based on the laboratory findings. The medical men did not take into consideration the clinical findings, because stippled cells were present. In most of these cases the men do not consult the physician in search of treatment; the object is medical testimony. They are not in search of health but of easy money. If successful, remarkable cures are accomplished; their strength and health returns as if by magic, and they find that they are able to take up the same work once more, although often in a different locality. There have been cases unearthed where the men were receiving partial permanent disability awards from one factory, and working steadily and full time in another. In doubtful cases of this category, I have adopted the following procedure. Thorough hospitalization for a complete study of the condition and measures used for relief of conditions complained of; if negative for intercurrent pathology, deleading and supportive and building-up treatment. This method seems to me ideal, for the patient is given the benefit of the doubt, and if it is a true lead case deleading and supportive treatment will cure him; if some other disease, it can be brought to light and accordingly treated; if the condition is imaginary, hospital routine and intensive study will bring it to light. In fairness to the patient, temporary disability should be paid during the period of hospitalization, and afterward until declared again able to work, if the debility is due to lead.

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### LIVER CYSTS; REPORT OF CASE

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Owing to its comparative rarity the following case is being reported with some detail. The Massachusetts General Hospital records

(1870-1905) show that in 1858 operations on the liver only 6 simple cysts were found.

#### CASE REPORT

Mrs. K., American, aged 32, was taken ill at 7 a. m. August 8, 1930, with a continuous sharp pain arising in the right upper quadrant and radiating across the epigastrium; pain so severe that she fainted. After she revived the pain, still present, was accompanied by vomiting and retching. A stomach sedative curtailed both vomiting and retching but the pain persisted. At time of attack the temperature was 102°F. (oral), pulse 92, and respirations 20. Patient slept that night, after taking a narcotic. The following day she was seen at 10 a. m. by Dr. Hermann, at which time she presented the following features:

Temperature 101°F. (rectal); pulse 100; respirations 30; blood pressure 140/82 (auscultatory, prone). General examination revealed nothing. Abdomen was rounded, somewhat due to fat and flatulence; right upper quadrant particularly prominent. Upper abdomen was tender to palpation, accentuated over a small area just below costal margin in the right mid-clavicular line. A mass was palpated there, approximately 7 cm. in diameter which seemed to extend up under the liver; it was neither elastic nor was a hydatid thrill elicited. Percussion note was dull over this area. Auscultation revealed nothing.

*Past history.* Measles as a child. Influenza in 1928. Two months ago (June 1930), after returning from an automobile ride, she had an attack of "chills and fever" which lasted through the night. Again, 1 month ago (July 1930), noted some "vague pain" in the upper abdomen which lasted a few hours and was followed by a sensation of soreness over the whole upper abdomen, which persisted for 8 hours accompanied by some nausea and vomiting. A burning epigastric pain lasting an hour has been caused by anything eaten since that time. Has had occasional spells of dizziness during the past month—no particular time or relation to meals. Gravidia ii; Para ii. Nothing unusual noted during periods of gestation. Mother died of a liver carcinoma.

*Laboratory findings.* Blood count showed 16,600 polymorphonuclear leukocytes; the dif-

ferential was 88% neutrophils, 10% lymphocytes and 2% monocytes. Urinalysis showed 1 + albumin. Stool was negative for blood. Roentgenogram showed a distorted duodenum and a filling defect in the pylorus which was irregular and suggestive of malignancy.

Due to the foregoing data, and because of the persistent pain, an exploratory laparotomy was decided upon.

*Operation:* On August 15, 1930, under gas-oxygen induction and ether maintenance, a right rectus incision was made. The mass was seen to be cystic and extended inferiorly from the porta hepatis to about 4 cm. below the liver border; laterally from about 5 cm. left of the round ligament of the liver to approximately 9 cm. to the right of that structure. It was firmly attached to the round ligament and contiguous liver surface; the gall-bladder was not adherent. The pylorus and duodenum were compressed and inflamed. When the pressure was removed, contour of both stomach and duodenum was normal; no adhesions were noted. The cyst was incised and found to have 7 connecting secondary sacs varying from 2-6 cm. in diameter. The sacs were evacuated of 250 c.c. clear, serous fluid and 5 c.c. inspissated pus. A portion of the wall was resected for pathologic examination. There was no visible connection with either the common bile duct or the gall-bladder. Two cigarette drains were placed into the cyst and the opening sutured to the peritoneum. A similar drain was placed in the abdominal cavity terminating near the porta hepatis. Retention sutures were taken and the layers of the abdominal wall were closed separately. There was little blood lost and the patient stood the intervention well.

*Laboratory report.* The pus was sterile and neither hooklets, scolices nor biliary elements were found.

*Pathologic report.* From the portion resected, Dr. Harrison Martland could find no evidence of malignancy or hydatid disease, and he diagnosed the tissue as coming from a simple cyst of the liver.

Convalescence was uninterrupted. The wound closed cleanly and the patient was discharged August 30, 1930. She has since been



seen at frequent intervals and is apparently in the best of health. The former abdominal pain and discomfort after meals are entirely gone.

### LIVER CYSTS

It is almost as difficult to give a satisfactory discussion of cysts as it is of general tumors; there are so many varieties and so many exceptions. A cyst may be defined as a well circumscribed, pathologic collection of fluid, tending to persist and increase (McFarland). Not including cysts of the gall-bladder or extrahepatic ducts, those found in the liver may be classified as follows:

*Hydatids.* Due to infection of the larval form of the *Tenia echinococcus*; the diagnosis being based upon a minimum of symptoms. Brum considers the reaction of Weinberg of no practical value and although a 2-5% eosinophilia was confirmed at operation as echinococcus infection in 80% of 147 cases, he places little importance upon this finding. In only 2 cases was the hydatid thrill elicited and he observes that: (1) There are no clinical symptoms manifest so long as the cyst remains small and hidden. (2) When it does become exteriorized there is only 1 symptom: tumor. (3) The biologic reactions have no practical value.

*Intrahepatic biliary cysts.* From continued obstruction the intrahepatic ducts may be widely dilated. The contents may be thick, inspissated bile with a healthy gall-bladder, or colorless bile when the gall-bladder is unable to cause concentration. This condition has been termed "hydrohepatosis" by Rous and McMaster. Occasionally small retention cysts are seen associated with cirrhosis.

*Cysts due to multiple adenomas.* These are small and develop at the expense of the epithelial cells of the intrahepatic biliary canaliculi. Because of this they are thought (Scalone) to be the most important of all cystic new-formations in the liver.

*Simple cysts.* These may be single or present in small numbers and may be due to biliary retention, although when large the bile may disappear and the fluid then become colorless. Constantine and Duboucher consider their origin the same as cystic disease. A single cyst not parasitic or due to change in an adenoma of the bile ducts may contain

much fluid; in Bayer's and Winckler's cases 6.5 liters. Cousins reported an instance in which a cyst of the liver contained 2½ gallons (11.3 liters) of clear, limpid, yellow fluid. Like simple cysts of the common bile-duct females provide the vast majority of the cases; out of 56 cases, 44 were females (Jones). The clinical symptoms are essentially those of hydatid cysts (q. v.) from which they can be distinguished by an examination of their contents. Jaundice has sometimes been noted (Doran and Munk). Very severe symptoms may be caused by extensive hemorrhage into or rupture of a cyst.

*Pseudo-cysts.* These are due to softening down of sarcomatous or carcinomatous nodules; here the contents may be blood stained or clear but the former occurs in the majority of cases. In either event a microscopic examination of the cyst wall should show some evidence of malignancy.

In general, diagnosis of liver cysts is extremely difficult and depends almost wholly upon a microscopic examination of the contents and a section of the wall. According to Jones, Kilvington of Melbourne, where hydatid cysts are common, made the correct pre-operative diagnosis in an instance of non-parasitic cyst, his criterion being that the fluid tension was less than in the ordinary hydatid cyst. Clinically, apart from hepatic enlargement or the presence of cysts which have been known to simulate ovarian cysts or a dilated gall-bladder, symptoms pointing to the liver are usually wanting. In a series of cases of liver cysts reviewed by Caylor, of the Mayo Clinic, pain was a common complaint. Jaundice may be present if there is pressure on a bile-duct. In cystic disease of the liver the symptoms are those of chronic renal disease from the usually accompanying megalocystic kidneys, such as uremia. It is to be noted that in large tumors of the liver the colon is displaced downward and to the left, while in large kidney tumors the colon lies over the swelling (Hofmann). Excursion of the diaphragm producing change in the position of the tumor may aid in ascertaining the site of the mass; however, large cysts may produce sufficient pressure to practically inhibit diaphragmatic excursion.

*Treatment.* Cysts that occur particularly in connection with bilateral polycystic disease of the kidney, as a rule, require no treatment. If marked, they may be aspirated or resected. The type of cyst one finds may alter the operative procedure, but there are some points that should always be observed: (1) Where the mass is large, shock is to be guarded against. Here, quick evisceration may result in an acute fall in blood pressure. By slowly decompressing the abdomen or by the subcutaneous administration of pituitary extract, prior to the sudden release of intraabdominal pressure, shock may be avoided. (2) The cyst should be walled off from all other abdominal contents. This is most important in the event that the structure is of the hydatid variety. (3) When and if opened the contents, with a section of the wall, should be examined immediately under a microscope; operative procedure may then be altered to accommodate the findings.

Mortality statistics would indicate that the most favorable procedure is to incise the cyst, draw off the contents, and suture the cyst wall to the peritoneum or skin. This may be done in 1 or 2 stages and is commonly known as marsupialization. The first stage, consisting of suturing the unopened cyst to the peritoneum or skin, is followed by (second stage) incision and drainage after sufficient adhesions have formed. In some cases one may enucleate the cyst in its entirety and this, of course, is always desirable.

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### **TREATMENT OF ACTIVE MEASLES BY INTRAMUSCULAR INJECTION OF RECENT CONVALESCENT WHOLE BLOOD**

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Medical literature contains many articles on the use of immune serum for the prevention or modification of measles, but little has been written on the use of recent convalescent blood in the actual treatment of active measles.

Kellogg (Jour. A. M. A., Dec. 21, 1929, p. 1927) states: "Convalescent serum has been

found to be effective in preventing measles, but it is useless as a cure, once the disease is established."

Rowland G. Freeman, Jr., of New York, states: "It has been attempted to abort the disease (measles) by the injection of 20-30 c.c. of serum during the period of invasion, but we have had no results that would indicate any benefit from this measure."

Kato (Amer. Jour. Dis. Children, Sept. 1928, pp. 526-573) summarizes: "Convalescent serum has been employed in the active treatment of a few patients with malignant measles; when a large amount of the blood is used, as in transfusion, the effect seems to be beneficial."

The following two case reports illustrate this treatment, demonstrating the practical abortion of fully developed measles, and immediate convalescence. Whether these treated children have developed a personal immunity, I cannot say.

*Case 1.* Baby W., aged 18 months, is the youngest of 4 children. The oldest, aged 10 years, came down with an average case of measles. About a week later the second, and then the third child, became ill with typical measles. The mother was reluctant to have the youngest injected with immune serum; but when it, too, developed the rash, after 4 days' sneezing and red eyes, she requested the treatment. By this time the eldest patient was entirely convalescent and I withdrew 10 c.c. of his blood and immediately injected it into the buttock of the infant. Within 24 hours the rash was entirely gone, temperature was normal, and the child in usual good spirits. There was no relapse or complication.

*Case 2.* Baby J., aged 11 months, is the youngest of 3 children. The oldest, aged 6 years, became ill with measles complicated by a purulent dacryocystitis. About 10 days later, the second child, aged 4 years, and the 11-months old infant both exhibited the rash, after the usual prodromal symptoms. I withdrew 10 c.c. blood from the 6 year old convalescent boy and immediately injected it into the buttock of the infant. The next day the rash and fever were gone and the child was entirely well. The 4 year old girl ran the usual course of uncomplicated measles.



In the first case I had little hope of any result, as the rash was already present; and was surprised, as well as pleased, to see the disease promptly checked within 24 hours. In the second case the circumstances were also propitious for this therapy, and the favorable result was expected.

THE ANEMIA OF PREGNANCY

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Possibly as an aftermath of studies in prenatal care, the fact that pregnancy *per se* may be the cause of a varying degree of anemia is attracting increasing attention. The phrase "anemia of pregnancy" is more usually applied to the severe, acute hemolytic anemia infrequently encountered, or to that form which, both cytologically and symptomatically, may present more or less resemblance to the pernicious form. These, however, are so symptomatically evident that they are seldom overlooked.

Of greater importance, both because it is more common, and because without particular effort it is easily over-looked, is a definite secondary anemia without obvious symptoms but occurring in a large number of cases. Bland and Goldstein<sup>1</sup>, for example, report 50 cases in which the hemoglobin varied from 42 to 78%, and the erythrocyte count from 2.36 to 3.98 millions. Of these 92% made spontaneous recovery after delivery.

Lyon,<sup>2</sup> in about one-third of 200 cases studied, found a hemoglobin of less than 70% and similar findings have been reported by Galloway<sup>3</sup>, Moore<sup>4</sup>, Kerwin and Collins<sup>5</sup>, and others. That these studies are of practical importance is readily apparent, for it is obvious that a woman with a definite secondary anemia cannot be expected to stand a prolonged or arduous labor as well as one whose blood picture is normal. If, as would seem to be the case, this condition is a common concomitant of pregnancy, then its occurrence must be

taken into account in the conduct of prenatal measures.

The present report records the findings, as regards hemoglobin and erythrocyte counts, in 300 women registered in the Obstetric Dispensary of the Atlantic City Hospital. The cases were unselected in any way. The report is based upon a single examination but, nevertheless, presents findings of distinct interest as shown in the tables below.

TABLE I.  
HEMOGLOBIN AND ERYTHROCYTE COUNTS  
ARRANGED IN ACCORDANCE WITH  
DURATION OF PREGNANCY

Duration of Pregnancy: Months	Number of Cases	Average Hemoglobin		Average Erythrocyte Count: Millions per cu.m.m.
		%	Gm. %	
1 — 3	12	73	10.07	4.50
4 — 6	72	72	9.93	3.73
7 — 9	216	66	9.10	3.73

From these findings it is not only apparent that a secondary anemia was encountered in a high proportion of the cases studied, but also that the anemia varied in degree in proportion to the duration of pregnancy, being more marked in the last than in the first or second trimester.

In this table both hemoglobin readings and erythrocyte counts were averaged.

If 75% is arbitrarily taken as the lower limit of normal, and 4,000,000 erythrocytes similarly accepted, it is seen that in the 12 patients in the first trimester the findings taken as an average are approximately normal. As a matter of fact, however, one of these patients whose Wassermann (Kolmer quantitative) was 44400, had a hemoglobin of 70 and a red cell count of 3,820,000; and another, a hemoglobin of 69 with a red cell count of 3,720,000.

In the second trimester the individual variations were somewhat more marked, ranging from 45-82 hemoglobin and from 2,-640,000 to 4,300,000 red cells. Nevertheless, evidence of anemia was found in 65, or 91% of the 72 cases examined.

In the third trimester only 34, or 15%, had readings within the arbitrary normal limits outlined above, well marked anemia being present in 87% of 216 cases.

These results, which are in uniformity with

those reported by others, leave little room for doubt that pregnancy *per se* is a cause of a definite degree of secondary anemia, the severity of which bears a somewhat proportionate relation to the duration of the pregnancy.

While the occurrence of secondary anemia in pregnancy is no longer disputed there has been, and still is, much discussion concerning its etiology and mechanism. Among the more prominent theories which have been advanced are: that the anemia is the consequence of hydremia with subsequent reduction in the iron content of the red corpuscles—in other words that it is a chloro-anemia; that it is the expression of an "individual disposition" in accordance with the general physical well-being of the particular patient; that it results from the action of a syncytial hemolysin; that it is the product of poor hygiene or such diseases as nephritis, syphilis, tuberculosis, and so on; that it is a continuation of a preëxisting anemia; or that it depends upon the presence of focal infections.

\*While it is quite true that any of the factors listed may be the cause of secondary anemia, such factors are neither present with sufficient constancy nor found in a sufficiently large number of cases to be accepted without reserve. There seems little reason to doubt that a well-marked secondary anemia is a frequent occurrence in pregnancy; that its etiology and mechanism are as yet undetermined and obscure; and that pregnancy *per se* is a definite factor in its production.

The establishment of these facts indicates the desirability of blood examinations as an important part of prenatal study and care in order that patients presenting hemoglobin readings of less than 75% and erythrocyte counts of less than 3,000,000 may be detected and subjected to suitable therapeutic measures.

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## HIGH LIGHTS IN THE LIFE OF ROBERT KOCH

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Robert Koch, of Klausthal, was educated in the gymnasium of his native town, and took his medical degree at Göttingen, where he was very much influenced by the teachings of Jacob Henle, whose theory of contagion may have started Koch upon his life-work in science. After serving in the Franco-Prussian War, he became district physician at Wollstein, where he varied the monotony of long journeyings over rough country roads by private microscopic studies. He began with anthrax, and in 1876 wrote to the eminent botanist, Ferdinand Cohn, at Breslau, to the effect that he had worked out the complete life history and sporulation of the anthrax bacillus. About a week later, at Cohn's invitation, he gave a demonstration of his culture methods and results at the Botanical Institute in Breslau, in the presence of Cohn, Weigert, Auerbach, Trube, Cohnheim, and others. Cohnheim declared that Koch's was the greatest bacteriologic discovery yet made, and Cohn immediately published his paper in his *Beitrage*.

This report demonstrated that the anthrax bacillus is the cause of the disease, and that a pure culture grown through several generations outside the body can produce the disease in various animals. Koch's results were very much opposed by Paul Bert, but completely confirmed by Pasteur. The next year Koch published his methods of fixing and drying bacterial films on cover-slips, of staining flagellae, and photographing bacteria for identification and comparison. Then his great memoir on the etiology of traumatic infectious diseases appeared, in which the bacteria of 6 different kinds of surgical infection are described, with pathologic findings, each microorganism breeding true through many generations in vitro or in animals. These 3 memoirs elevated Koch to the front rank in medical science and, through Cohnheim's influence he was appointed to a vacancy in



the Imperial Health Department, with Loeffler and Gaffky as assistants. Here, he produced his important paper upon the method of obtaining pure cultures of organisms by spreading liquid gelatin with meat infusion upon glass plates, forming a solid coagulum. When Koch demonstrated his plate cultures at the International Congress, in London, Pasteur vehemently declared his approval of Koch's great progress. The next year was marked by discovery of the tubercle bacillus, by special statement of "Koch's postulates", establishing the pathogenic character of a given microorganism, which had already been adumbrated by Henle and Edwin Klebs. About the same time Koch and his assistants introduced sterilization by dry heat. Then, Koch at the head of the German Cholera Commission, visited Egypt and India, discovered the cholera vibrio, its transmission by drinking-water, food, and clothing, and incidentally found the microorganisms of Egyptian ophthalmia or infectious conjunctivitis, which is the Koch-Weeks bacillus, for which results he received a donation of 100,000 marks from the Prussian State. Then he was appointed professor of hygiene and bacteriology at the University of Berlin, where his laboratories became crowded with bright pupils from all over the world, among whom were Gaffky, Loeffler, Pfeiffer, Welch, and Kitasato.

At the Tenth International Medical Congress, at Berlin, Koch announced his belief that he had found a remedy for tuberculosis; the introduction of tuberculin, his one mistake, in that it was prematurely considered, was hailed all over the world as an event of the greatest scientific moment, and honors and felicitations of all kinds were showered upon him. Although he himself had limited his claims to the possible cure of early cases of phthisis, the great hopes which had been entertained of the remedy were not realized in time, and the number of failures and fatal cases impaired the confidence of the profession, but abated little of Koch's great reputation, especially after discovery that tuberculin is the most reliable means of diagnosis. In 1891, the In-

stitute for Infectious Diseases was founded in Berlin, and remained under his direction until he resigned in favor of his pupil Gaffky. While directing the institute his ideas were applied in fighting the cholera epidemic at Hamburg, and during this time he wrote an important paper on water-borne epidemics, showing how they may be largely prevented by proper filtration. He investigated rinderpest in South Africa at the request of the English government, devised a method of preventive inoculation, and made valuable studies of Texas fever, blackwater fever, tropical malaria, surra and plague. The next year he produced his new tuberculin, and after that investigated malaria fever in Italy. At the London Tuberculosis Congress he announced his view that the bacilli of bovine and human tuberculosis, which had been separated and studied by Theobald Smith, are not identical, claiming that there is little danger of transmission of the bovine type to man. These views were reiterated at the Washington Congress, and on both occasions aroused violent controversy, the general trend of opinion being in favor of Koch. Next, he studied Rhodesian red-water fever, horse-sickness, trypanosomiasis, and recurrent fever in German East Africa, and in the same year established methods of controlling typhoid which have been adopted almost everywhere.

Koch received the Nobel Prize after resigning the directorship of the Institute of Infectious Diseases and then visited Africa again at the head of the Sleeping Sickness Commission, introducing atoxyl for the treatment of the disease. Although he was honored by a membership in the Prussian Academy of Sciences and the title of Excellenz, he was not happy in the later years of his life. Certain changes in his domestic arrangements estranged many of his friends, and subjected him to harsh criticism, which he bore with stoicism and dignity, but which told upon him in the end. He died of heart failure at the age of 67, thus ending the life of one of the greatest men of science that his country has produced.

## ETIOLOGY, DIAGNOSIS AND TREATMENT OF PEPTIC ULCER\*

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### INTRODUCTION

The terms peptic and pyloric ulcer are used here inclusively to denote both gastric and duodenal ulcer, which in the majority of cases occur within  $1\frac{1}{2}$  in. on either side of the pylorus. Some ulcers occur fairly high on the lesser curvature, and the English, and now many American writers, use the term peptic ulcer as descriptive of both groups. Some American writers always distinguish between gastric ulcer and duodenal ulcer on the ground that their course differs, their management varies, that surgery is more commonly needed in one than the other, and even that there may be differences in pathogenesis. Anatomic and physiologic considerations, however, are so much the same as to make it reasonable to think of the pyloric area as embracing the distal  $1\frac{1}{2}$  in. of the stomach and an equal portion of the proximal duodenum. There seems no reasonable justification as yet for a dividing line between stomach and duodenum, with differing indications, prognosis, and therapeutics on the two sides. It seems simpler and more sensible at present to include the entire area in a single conception, and the terms "pyloric ulcer" and "peptic ulcer" will therefore be used interchangeably to denote the same condition.

An exposition of pathology and symptoms has not been attempted in this discussion, as they are partially and, it is hoped, sufficiently dealt with in the sections on etiology and diagnosis.

### ETIOLOGY

The etiology of ulcer of the stomach or the duodenum is still one of the befogged areas of medical controversy. Various ideas

have been and still are current, all largely hypothetical, and backed up only partially and incompletely by experimental work or exact knowledge. We know much about the physiology of the stomach; we are on the eve of knowing more about distortions of that physiology; but as to how an erosion of the mucous membrane begins, or why in some cases it should go on to form a chronic ulceration which upsets the digestive economy, and too often threatens the victim's life, is still something of a mystery. The problem, according to Aschoff (and in this he is followed today by most observers), centers around the explanation of 2 phenomena: (1) the primary break in continuity of the mucous membrane, i.e., the acute ulcer phase; and (2) its failure to heal, the chronic phase.

Rehfuß has offered evidence that acute ulcer may be produced by extraneous toxic substances introduced into the stomach, and Bolton believes that metabolic toxins can produce the same effect. Durante has shown very definitely that trophic disturbance can cause acute ulceration which may persist as a chronic lesion. He concluded the report of his experimental work thus: " \* \* \* \* ulcer may be produced by any agent capable of damaging the sympathetic nervous system (the median splanchnic nerve in particular), as it is on the integrity of this system, which controls circulation, secretion, and profound sensibility in the stomach, that the very life of the gastric cell may be said to depend. The theory of trophic ulcer must be taken in this sense." Judd, reviewing the etiology of ulcer in the 1927 Mutter Lecture, while mentioning Rosenow's work, places most emphasis on the research of Mann demonstrating in animals the invariable development of ulcer whenever the duodenum was sidetracked so as to keep the biliary and pancreatic fluids away from the pylorus; and likewise the cure of ulcers so produced by restoring the normal admixture of gastric and duodenal juices at the pyloric region. Rosenow offered evidence in 1913 that streptococci injected into the blood stream may have a selective affinity for the gastric mucosa and produce acute ulcer. In a later publication (1916) he stated that to support the idea that gastric ulcer in man is due

\*(Read before Warren County Medical Society October 21, 1930.)



commonly to a local hematogenous streptococcal infection, it would be necessary to show: first, that in such ulcers streptococci are usually present to the exclusion of other types of bacteria; and second, that streptococci isolated from the ulcer wall, as well as those from foci of infection in the same patient, will produce, when injected into animals, ulcers of the stomach or duodenum resembling those in man. He then retails the experimental work by which he supports these postulates.

No one of these ideas has been substantiated as yet by a sufficient number of other workers to make it universally acceptable as the established etiologic factor; but there is slowly accumulating considerable evidence that the primary necrosis of the mucous membrane is caused in some such manner as these various lines of research indicate, with a preponderance of evidence in favor of some form of bacterial activity. Only recently (1928) Nickel and Hufford have reported an exhaustive study of the elective localization of streptococci obtained from peptic ulcers, and declare their complete agreement with Rosenow. They state a further important conclusion, that "the overwhelming number of patients suffering from peptic ulcer harbor \* \* \* septic foci".

Given whatever causation of an area of necrosis on the mucous surface of stomach or duodenum, most observers agree that action of the hydrochloric acid or the pepsin, on the raw surface thus produced, plus traumatism from peristaltic unrest, will tend to make and keep the ulceration chronic. Whether bacterial action can continue in the presence of the gastric juice is doubtful, for only a few active bacteria can be cultured out of the gastric contents, or from a base of such ulcers postmortem; and the consistent growth of bacteria *in vitro* in an acid medium equivalent to that of the gastric secretion, has not been successfully accomplished.

The factors making for chronicity of an ulcer once begun are probably numerous. It is quite possible that many ulcers arise and heal spontaneously, without perhaps ever having been recognized. The irritating quality of the gastric juice may be the largest single factor making for chronicity; but peristaltic unrest, irritating foods, toxins of metabolic

origin, successive bacterial invasion, and lowered vitality and resisting powers on the part of the patient, must all be taken into consideration. Another factor may be that the disturbance of gastric physiology which results from the presence of an ulcer, or from conditions which produced it, causes a fatigue or depression of the local healing forces inherent in the gastric mucosal cells. Holman stresses the importance of fatigue, particularly a localized fatigue of those cells concerned in the pathology of the condition, and then makes this sensible and conservative statement: "The frequently satisfactory results of simple means of giving rest certainly speak against the primary dominant importance of bacteria in the etiology, but should not blind us to their extremely dangerous rôle in complicating the condition, and where their source is in other infected foci these should certainly be attended to."

An important and common clinical observation is that ulcer is a condition prone to relapse. It would be better perhaps to use the word "recur"; for it is quite likely that the ulcer heals, and a fresh ulcer forms later on, due to the same factors which brought about the original ulcer and which have not been removed. It has been a striking fact in our own cases that several patients who have for periods of 3-5 years shown no tendency to recurrences, are cases in which were found very bad tooth root infections, which were cleaned up soon after instituting treatment. If this observation has any etiologic significance it tends to support the idea that bacterial activity of some sort has to do with the inception of ulcer.

In summarizing this question of etiology, Nickel and Hufford say: "It is universally agreed that the fundamental change *per se* in the gastric or duodenal mucosa is impaired nutrition in a localized area, with subsequent necrosis, sloughing, and digestion in the injured area by the corrosive action of the acid gastric juice. The mechanic, corrosive, thrombotic, embolic, and neurogenic factors are emphasized by the exponents of the different theories."

*Conclusion.* For clinical purposes, then, it seems a fair assumption, on the basis of pres-

ent day evidence, some of which is factual, while other is hypothetic and from analogy, that ulcer is induced primarily by blocking of the terminal vessels in the gastric or duodenal mucosa, possibly due to bacterial invasion, which thus causes a localized area of necrosis; that this probably occurs most readily, or perhaps only, in a patient whose general resistance is lowered, and whose local resistance also is fatigued; that, an ulcer once established, its chronicity is determined by the digestive action of acid gastric juice, peristaltic unrest, and the influence of toxins from without or within the organism, as well as other ill-understood factors.

This offers a very practical working hypothesis to the clinician; for it leads him logically to his most important measures for treatment, namely, physiologic rest, and the eradication of infective foci. \*

#### DIAGNOSIS

There is one and only one indisputable method of accurate diagnosis; and that is direct visualization of the ulcer by the surgeon or pathologist at operation or at autopsy. These gentlemen maintain a certain Presbyterian smugness on this question of diagnosis, because they are so sure of their position as the final arbiters. Nevertheless, the practitioner must do the best he can to determine, as nearly as may be, an accurate diagnosis for the patient who he hopes will come neither to operating nor autopsy table; and it is assumed that this discussion deals with the earlier and more benign stages of ulcer, and not with lethal or near lethal conditions.

Prior to and apart from either of these regrettable procedures the nearest approach to accuracy is that of the roentgenologic demonstration of a constant niche on the outline of either stomach or duodenum. If the roentgenologist is not happy in his choice of angle at which the films are exposed, or if he is impatient, or if he just does not happen, with all

his care and skill, to show the ulcer in outline, he will miss this demonstration of its presence. But to show a niche on a single film does not constitute a diagnosis. That evidence should be the same on 2 or more films taken at appreciable intervals. If it is present on more than one of several films taken minutes—not seconds—apart, it means something. The niche of ulcer may be simulated on a single film, or on successive films taken within a few seconds of each other, by the vagaries of peristaltic action combined with an adhesion on the peritoneal surface; and with niches that are not deep and pronounced this is a most confusing diagnostic factor, and failure at proper interpretation may destroy the differentiation between ulcer and gall-bladder disease. A constant incisura only indicates some irritative lesion in the gastro-intestinal wall ahead of it; and while that lesion is most commonly ulcer, because ulcer is the common condition, yet it may be due to cancer, or to gall-bladder disease. A 6-hour retention in the stomach expresses much the same thing, and, while usually due to ulcer, *may* be caused by other obstructive lesions. Hyperperistalsis must be interpreted with due regard for the physiology of the gastro-intestinal tract, and the reasons why such a phenomenon presents itself. Ulcer is not its sole cause. It is an evidence either of irritation or of obstruction.

Turning to other laboratory aids there is but little that is helpful; nothing that is pathognomonic. Urinalysis may be dismissed without comment. Blood chemistry offers no help. The white cell count may reveal evidence of a chronic infective process—nothing else—but it is of importance in that a leukocytosis or polynuclear increase should emphasize the need of a search for focal infection; and, without either leukocytosis or polynuclear increase, an abnormal number of immature forms of polynuclears is in itself an index of chronic infection. The red cell count may demonstrate an anemia, suggesting seepage of blood from an ulcerated surface; and, if it cannot be satisfactorily accounted for otherwise, may prove an important finding. Examination of the stools for occult blood is valuable, and should be a routine procedure. If care be taken, a positive test for occult blood should

\*A very complete résumé of the various theories of etiology and pathogenesis of ulcer appears in *The Medical Clinics of North America for September 1930*—by Held and Goldbloom, of Beth Israel Hospital, N. Y. Beyond its value as a review, however, it leads nowhere; and it is felt that the theories outlined above are the most practical and therefore constructive.



be regarded as abnormal and its significance carefully weighed, especially if accompanied by anemia of any appreciable degree. Blood, occult or gross, in the gastric content, demonstrated either in test meal or in vomitus, should be treated skeptically, remembering that it may be the result of traumatism. Gastric analysis has not proved itself anything but disappointing so far as the diagnosis of peptic ulcer is concerned. Hyperacidity is not a diagnostic finding in ulcer. Ryle has shown that it occurs too frequently in otherwise perfectly normal individuals; that it occurs in too many conditions other than ulcer; and that both hypo-acidity and normal acidity, may be demonstrated in too many ulcer patients. The method is wasteful both of the physician's time and of the patient's money, and not worth in its results the time, discomfort, or expense to both patient and physician that are required for its careful performance.

Lastly, we must consider the diagnostic data obtained by the clinician himself; and as a matter of fact these should be the most important of all. Upon his intellectual capacity, his ability to gather and weigh evidence, his genius for correlation of all the facts presented by his own investigation and that of his laboratory and x-ray helpers, depends the welfare of his patient. He has before him a question fundamentally of differential diagnosis. Periodic pain is an evidence *probably* of tonic over-contraction of the gastric musculature. It may occur as a result of lesion in the stomach or outside it. It may be due to toxic substances such as those from excessive use of tobacco, or from bacterial action, as in tuberculosis and focal infections. It may be an evidence of gall-bladder or appendix disease quite as truly as of ulcer. All these and many other conditions the clinician must keep in mind, carefully gather his bits of evidence, and evaluate them from every possible angle. There may be a fair certainty of ulcer; but before it is written down and treatment begun, is there reasonable assurance that it is not an appendix, that it is not gall-bladder disease, that it is not due to excessive smoking, that there is no chronic infection, or any other of the conditions which may reflexly or directly give rise to gastrosppasm?

The same statement applies even more forcibly to the symptom of hyperacidity or acid dyspepsia. While that symptom appears frequently with ulcer, it is also part of the symptom complex of other disorders, and must be regarded diagnostically with more than the proverbial grain of salt. The need for careful differential diagnosis was indicated in a recent experience of analyzing 255 of our own cases which presented these symptoms.

Vomiting of blood is strongly suspicious, but may occur in cancer, blood dyscrasias, cirrhosis of the liver, and is said to occur in chronic appendicitis.

Tenderness in the epigastrium may be present in any case which exhibits periodic pain or an excessive acid dyspepsia. Rigidity is a sign of ulcer near perforation, or at any rate of a near surgical condition.

*Conclusions.* The serviceable diagnostic criteria may then be summarized as follows:

- (1) Niche on x-ray examination.
- (2) Incisura on x-ray examination.
- (3) 6-hour gastric retention.
- (4) Hyperperistalsis.
- (5) Secondary anemia without other explainable cause.
- (6) Occult blood in the stool.
- (7) History of acid dyspepsia and of periodic pain.
- (8) Vomiting of blood.
- (9) Tenderness in the epigastrium.
- (10) Rigidity in the epigastrium.
- (11) Exclusion of other conditions which might present the same picture in whole or in part.

The first and the last mentioned would appear to be the points to be especially stressed.

Diagnostic criteria individually are uncertain, and only a careful balancing and weighing of all acquirable evidence will bring satisfactory diagnostic results. In the limited time at our disposal the high spots only of this subject can be touched. No effort at refinement of detail can be attempted. The purpose of this paper is served if it but indicates to the clinician that it is his job to diagnose ulcer; that he cannot sidestep that task nor safely or fairly shift the burden to the shoulders of the roentgenologist or the surgeon. Were diagnosis easy we would not be discussing it. It is

the type of problem which makes medicine interesting and attracts men of intellect to the ranks of the profession. Dean Quinn, in a recent number of the *Yale Review*, concludes his essay with this sentence which is *à propos* of our own discussion: "The difficulties themselves make the pursuit attractive, for its uncertainties arise from the very qualities that make it fascinating." The positive Wassermann, the Widal reaction, the finding of malarial plasmodia in the blood, are examples of a few—and they are very few—of the pathognomonic types of diagnosis. Were all medical diagnosis on this basis it might be turned over to technicians. The fault of clinicians is that they are too often looking for short cuts to save both time and intellectual energy. This is a lazy trait and does not belong to good medical practice. The work of diagnosis in ulcer rests with the clinician and can neither be evaded nor imposed on the technical worker in laboratories and operating room. It must be assumed by the man to whom it belongs, and whether he will or no, the clinician, if he be honest, must accept his responsibilities, admit if need be his own ignorance, but not try to shirk a task primarily his own.

#### TREATMENT

Distinctions between the management of gastric ulcer on the one hand and duodenal ulcer on the other have been attempted, and more or less satisfactorily maintained, by various writers. There seems to have been worked out, however, no clear cut indication either way, and it is probably safest to handle all cases, in the beginning at least, according to the same definite routine. The attending physician will discover sooner or later that some departure from the routine must be made in a fair number of his cases, dependent on individual peculiarities, requirements, or reactions.

The essence of medical treatment may be summed up in the one word—*rest*. This means primarily and always rest for the ulcerated organ; for an era continuously in motion and constantly called upon to work or function at full speed is not in an ideal condition for reparative work. Rest is essential to save time and bring about the best results, or even

any results whatever. Peristalsis in the stomach can no more be made to cease entirely than can the cardiac beat; but it may be reduced to a distinct minimum, first, by giving the stomach as little work to do as possible, and, second, by putting the entire body at rest, and so quieting down to the lowest ebb vascular and nervous tension in stomach and intestine.

To this end the first requisite is rest in bed for 1, 2, or 3 weeks according to individual need; and the second a carefully regulated diet, so arranged that for a few days a bare sufficiency is allowed to keep body and soul together. This diet should be simple and given at frequent intervals; for if any amount of hunger contraction is allowed to develop it will aggravate in the gastric wall the very condition of muscular tension, together with increased vascularity and activity, which it is so requisite to keep at a low level. Therefore, a temporary even though brief complete starvation is not desirable.

Lenhartz, Sippey, or Von Leube dietaries may be followed exactly or with modifications arranged according to the fancy and experience of the physician. These plans are all based on the reasoning outlined above; and of a dozen different physicians treating ulcer, no 2 may work out the same detail, and yet all will secure equally good results. Indeed, the same man may treat a dozen different cases with a dozen variations of his scheme. Milk and white of egg constitute the bulk of the diet for the early days; then whole eggs are added, and gradually cereal gruels, bread and butter, cream soups, cream cheese, puréed vegetables, etc. By the end of 3 or 4 weeks the patient should be on a diet which in quality and quantity will suffice him daily for the ensuing year.

It will be noted on inspection of these various dietaries that the essential element is exclusion of anything which cannot be readily broken up in the stomach or is not easily soluble. There is no roughage or indigestible residue. This is for 2 reasons: first, that by giving things easy of digestion the stomach has less work to do; second, that scratchy foods may unduly irritate or mechanically injure the gastric mucosa. The second is a poor reason,



but the first is probably good—to save the stomach from being over-worked and its resistance therefore lowered.

So much for dietetic principles. What of drugs? They play a minor but important rôle. Alkalies alone or combined with bismuth may be given before or after every feeding or in relation to alternate feedings only. A powder of heavy oxide of magnesia gr. 10, bismuth subnitrate gr. 5, and saccharum lactis gr. 5, 3 or 4 times a day is very useful. It is usually given after meals, but one sometimes finds the patient likes it better when given just before the feeding. This powder apparently controls the sour taste and heart-burn, alleviates the pain to a considerable extent, checks formation of gas, and keeps the bowels open. Tincture belladonna may be given in 5 or 10 gtt. dose with each powder, and probably does much to relax the gastrospasm which is perhaps the great pain producing factor in ulcer. There is little or no place for any other drugs in the routine handling of these cases. Some patients who are definitely hypothyroid are slow in healing ulcer, and their reparative processes will be hastened by judicious feeding of thyroid up to their metabolic needs. Alcohol is a distinct irritant to an ulcerated mucosa and must be rigidly excluded. Tobacco, through the effect of nicotin on the vagus, excites gastrospasm and is best discarded for the time being.

An ice bag to the epigastrium may alleviate pain and tenderness. Some patients find it soothing. Others prefer not to be bothered with it.

Rest in bed with bathroom privileges should be enforced for at least 2 weeks, or until pain has disappeared. This is especially requisite during the first week when the intake is low, running from 1000 to 1500 calories, and is not sufficient to admit of any unnecessary activity without dangerous loss of vitality and great over-draft on reserve strength.

Again, and it cannot be insisted on too often, bodily rest will secure greater rest for the stomach, and the more completely the stomach is quieted the sooner and more readily will the diseased area be restored to normal.

Such is the general scheme of medical care

of ulcer, and it will suffice for the largest number of patients. It is highly probable that, treated in this manner, the ulcer which reacts favorably is well started on its way to healing in 10 days or 2 weeks; certainly deep niches into which the end of a lead pencil might be thrust  $\frac{1}{4}$  in. or more show nothing to mark their site when filmed at the end of 2 or 3 months, and the smaller erosions perhaps heal in a very short time, almost comparable to the aphthous ulcers one sees in the mouth.

Confusion comes occasionally in the second or third week of treatment when the patient begins to complain of returning pain. Inquiry may show that it is rather different from the former pain—not definitely periodic, but sharper in character, and located lower in the abdomen. This is probably due to the magnesia, which may be cut down or stopped for 24-48 hours, when the pain disappears. Recurrence of real hunger pain, as the patient's diet is more extended, is not uncommon. It is probably due to slow healing of the ulcer, or to recrudescence, and is simply met by a return to first principles, and working the diet up again from the beginning. Inability to handle milk or eggs sometimes causes trouble. Substitution of malted milk, cocoa, or butter-milk will usually relieve the situation. If the bowels do not keep satisfactorily open, a daily enema is used.

There are certain intractable cases, and some of the cases with hemorrhage, which are best handled by passing a duodenal tube and leaving it in situ for a period of 1-3 weeks, feeding peptonized milk and eggs through the tube at 2 hr. intervals. A longer period in bed is necessary for this type of patient.

And finally there is the case which relapses persistently; or shows no tendency whatever to heal; or which bleeds persistently; and for this the answer must be supplied by the surgeon. Perforation and definite organic obstruction at the pylorus are, of course, surgical as soon as diagnosed.

How to prevent recurrence? No one knows the true answer to this question but a carefully restricted diet for 1 or 2 years is essen-

tial, and as soon as the patient is around and on his feet after the preliminary rest period, all infective foci must be searched out and so far as possible eradicated. If there is anything in the theory of bacterial influence in this dis-

ease; if there is any reasonable analogy from other conditions familiarly associated with focal infection; a house-cleaning of bad teeth, sinuses, tonsils, etc., is in order for every patient who has had ulcer.

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## ANNUAL CONVENTION

# *Medical Society of New Jersey*

## Asbury Park, June 3-5

Are you preparing to attend the 165th Annual Meeting of your State Society?

We hope to publish, as usual, in the May Journal, a complete program. Meanwhile, accept our assurance that it will be attractive, and make your reservation for self and family—for the Woman's Auxiliary is making enticing plans for your wife or nearest female relative—at the Berkeley-Carteret Hotel.

Our confreres in Monmouth County, collectively and individually, are striving to make the Asbury Park convention a big success. Give them your loyal support.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if:

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, (address above), Newark, N. J.

## DOCTORS ARE "EASY MARKS"!

At the very moment when we were denouncing the American Tobacco Company for broadcasting the statement that more than 20,000 physicians had signed endorsements of Lucky Strike cigarettes; and while we were expressing doubt that so large a number could have "fallen for" the method employed to secure their signatures—and doubt whether any ever signed the phrase alleged (that Luckies are less irritant to the throat than other cigarettes); some of our own state society members were doing their level best to prove that even physicians of considerable experience with public affairs *can* be induced to sign most anything.

The Atlantic City Daily Press, of February 2, 1931, carried a quarter-page advertisement of a certain cigar, and the central feature of that "ad" is a letter signed by one of the best known city health officers of the state. A few days later the Newark Evening News contained a similar advertisement with a similarly featured letter signed by another equally well known city health officer. These special letter advertisements have appeared in other newspapers inside and outside of this state, and each of them so far observed says that almost 57 varieties of health officers have furnished the tobacco company with such letters. The advertisements referred to not only publish the health officer's letter but they make the most of his official position by displaying in large type headlines, his name, title and

location; disclosing very clearly what the advertising company was after and to what it attributed any value his testimonial might have.

The letters, themselves, are worth reading by any one interested in advertising methods or in medical and business ethics. In the first place it will be noted that each letter contains a clause—we suspect dictated by the company's agent—designed to relieve the company of any responsibility for publishing the signer's opinion; "any use you may care to make of this letter will be agreeable to me", is a phrase that must have been supplied by the company, for it could not possibly have originated spontaneously in the minds of more than 50 letter writers in different parts of the country. That last sentence in each letter—even though it is varied slightly—not only justifies the above mentioned suspicion; it even arouses our suspicions as to authorship of other portions of those letters. Did the doctors really write the letters, or did they merely sign—on the line—letters presented to them? Not that the answer matters; they made themselves responsible for the letters, in either event, but an answer might contribute something toward a determination of just how "easy" they were.

It is difficult to assume that these health officers independently constructed and voluntarily submitted the letters to the cigar company or its advertising agency, but let us try to adopt that assumption and read their let-

ters in that light. The naïveté exhibited—of purpose and phraseology—will certainly entertain you. Each congratulates the company upon its noble *health crusade* or commends the company for conducting a war against possible infection from spit. One such letter we have seen actually becomes rather slobbery in its effusive endorsement. The combination of health officers and cigar manufacturers threatens to annihilate the “friends of spit”, whoever they may be. Well, a crusade by a tobacco selling company against spit and spitting would surely be another noble experiment, and would possibly be deserving of commendation by those doctors were it not for the fact that a moron confronted by the conditions existing when the letters were signed could scarcely have avoided noting that the company was not half so much interested in protecting the health of smokers as in having the letters convey to the public the impression that all other cigars than this one brand are manufactured in a filthy manner. That is the proposition those men actually signed; that is the object of the advertisements in which their letters are embodied. Is it possible they were so simple minded as to suspect no ulterior purpose—so innocent as to believe this cigar advertising campaign to be a public health crusade?

The following Associated Press item appeared in newspapers all over the United States on February 16:

“Cigarette Advertising Assailed. Washington, February 15, (AP).—In an editorial in its weekly clip sheet attacking the ‘tobacco companies’, the Methodist Episcopal Board of Temperance condemned the creation of an ‘impression that the use of cigarettes by young women is socially necessary’, and the testimony ‘bought’ from physicians and others concerning the effects of tobacco.”

We submit that this is not a nice thing to have said about our profession; especially as we are compelled to admit that *technically* the charge is true. The physicians who signed cigarette or cigar testimonials probably did not realize that they were being *bought*, but the company probably felt it was paying for the act when delivering to the signers a carton of cigarettes or a few cigars; incidentally, a pitifully small price considering the use made of the testimonials.

## THE PHYSICIAN AN IDEALIST

At a time when the medical profession is being “knocked” on every side and the honest physician hesitates to open any monthly magazine lest he shall be greeted by another printed attack upon himself or his confrères, it is interesting to run across words of praise from an unexpected source. The Bulletin of the Medical and Chirurgical Faculty of Maryland (the Maryland State Medical Society) for March contained a short article setting forth the views of a distinguished trainer of college athletes, Knute Rockne, who has had contact with thousands of young men at the age when they are making choice of a career. As stated by the Bulletin, his observations and his philosophy are not only refreshing but they should carry weight.

In tracing the career of one of his former gridiron stars, who had elected to study medicine, he said: “No other profession is nearly so exacting. I have been wondering what makes young men want to go into the practice of medicine with all its grief, endless hours, long preparation and what not. It has been my observation that the good doctors have a sort of spark in their eyes, whereas many other professions interest men from the standpoint of monetary reward, easy livelihood, soft berth, prestige or a stepping-stone to something else. This can never be said of medicine. Medicine apparently is all-absorbing and occupies all of a man’s wakeful moments, and even some of the others. I have tried to analyze some successful doctors and I find that all of them have personality, ability, honesty, capacity for work, a burning zeal toward perfection in their chosen specialty, and intense responsibility regarding the human lives they are taking care of.”

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## STATE MEDICINE

In the February Journal we published an interesting original article by Dr. Haigh, of Worcester, Massachusetts, author of the Bill presented to the legislature of that state proposing the establishment of state medicine on a plan modeled from that in use by the United States Navy; an article in which Dr. Haigh succinctly explains why he thinks some form



of state control of medical practice is inevitable and why he considers the Navy Medical Corps a suitable model for adoption.

In the March Journal we presented, in the course of a "travel talk", a summary of the British National Health Insurance Law, and our impressions with respect to its working, together with an explanation of a new proposition recently made by the British Medical Association for extension of that law—*state medicine in its complete form*—to the entire population.

This month, again in the "travel" article, we have described what is so far known of the new law which took effect in France so recently as July last. Also, in this month's Collateral Reading Department, we have told what little accurate information we have concerning Soviet control of medicine in Russia.

We have in hand several documents from Canadian provinces yet to be abstracted for publication, and we hope to digest that for our readers next month.

As stated elsewhere, and upon other occasions, the object in publishing this material is that members of this society may have ready access to facts concerning the existence of and progress being made by state medicine. Within the past month, a Bill has been introduced into the New York State Legislature that would provide for compulsory health, accident, life and unemployment insurance and old age pensions; an expansive combination. The day is certain to come when New Jersey will have such legislation to consider. Let us be well informed and prepared to meet the situation in a proper manner.

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#### PERSONAL INTEREST AND ACTIVITY

Spring is in the air and the time approaches when state and national medical associations command attention. Throughout the autumn and winter months county societies have held sway and the Journal has not only published accurate reports of their proceedings but has served as an additional medium for providing information—scientific and general—concern-

ing matters of special import to medical practitioners. The county society is the basic unit of medical organization. The state society constitutes the forum where all the county representatives may meet for conference with a view to effecting concerted, unified action upon important problems. During the past, or rapidly passing, year our members have been supplied with a vast amount of information relating to economic problems with which organized medicine at present has to deal. In all probability, some of those questions will be discussed, possibly acted upon, at the state society meeting in June. Possibly because that thought was in mind we were impressed by an editorial in the Ohio State Medical Journal for November 1930, and we quote it for your consideration:

"Frequent inventories are advocated by leaders in industry and business as quite necessary to the continued life and well-being of any business; as a practical method of keeping the concern economically sound.

The same procedure might well be followed by members of the medical profession, declares the *Bulletin of the Medical Society of Milwaukee County* (Wis.), to determine, if possible, to what extent each member may be responsible for some of the conditions which now exist in the medical field.

The Milwaukee *Bulletin* suggests that each physician ask himself the following questions in attempting to analyze just how much he has, or has not, contributed to his profession and to organized medicine:

(1) Have I coöperated with my fellow practitioners as I should, or do I criticize them when the opportunity presents itself?

(2) Have I given serious thought to the activities of the County Medical Society, and organized medicine as a whole?

(3) Have I offered a constructive thought in the cause of medicine, or do I resort to carping and useless criticism?

(4) Have I taken proper interest in public health and preventive medicine?

(5) Have I cultivated the vision which embraces public welfare and sees beyond the present, and includes the possibilities of the future?"

## Special Article

### MEDICAL TRAVEL TALK

#### A Physician's Vacation in Ireland, England and France

Henry O. Reik, M.D.,

(Continued from March Journal)

Most of our journeying through Ireland, Wales and Northern England had been accompanied by cool and rainy weather, but in London we encountered a heat wave, and we sought relief on a terrifically hot day, August 29, by proceeding onward to Paris. The Golden Arrow Express, which has been operating between London and Paris, by way of Dover-Calais, with a special boat service, for the past 3 years, is about "the last word" in luxury, speed and comfort. Americans are accustomed to boast of their own railroads and special trains but we could profit by an honest appraisal of English, French and German railroads and by adoption of their best features. In general, our service compares favorably with that of Europe, but in some respects Europe leads us—and that is particularly true in relation to comfort. The Golden Arrow (*Flèche d'Or*, in French) just referred to, the Oriental Express from Paris through to Constantinople, and the new German-equipped train that starts in Holland, at Rotterdam, and runs down through France to Switzerland and thence eastward, are all superior in beauty of construction, luxurious equipment and travel comforts, to any trains in the United States. Some of you may be surprised to learn that we no longer hold even the speed record. That is a record which we need not worry over, but as we boast of our speed in most things it seems odd that this particular blue ribbon should have been allowed to pass along to others; yet, the fastest train in the world is said to be the "rapide" from Paris to Bordeaux, and the longest distance nonstop run (393 miles) is made by the Flying Scotsman connecting London with Edinburgh in  $8\frac{1}{4}$  hours.

On this particular occasion we lingered in Paris but a few days—only long enough to arrange for an autobus trip through Brittany—and September 8 found us at Vannes ready to start upon a tour of that quaint portion of France. On the way to Vannes we had paid short visits to Rennes and Josselin; the latter an ideal place for acquiring the proper "background", the proper "state of mind", for absorbing medieval history. To reach

Josselin we had to make use of both modern and ancient types of transportation: a fast express from Paris to Rennes, passing through the beautiful "granary of France"; a local, "way train" (omnibus, as the French call it) to Ploërmel; a typical "Toonerville jerk-water", drawn by a small, wood-burning engine, upon a narrow gauge track, traversing a beautifully forested country; and, finally, on our own feet from the station, situated upon the edge of the old fortified town, to the hotel about an eighth of a mile away, and all of it up-hill, in the center of the town, facing the old cathedral, close beside the castle. But, having arrived, we felt repaid for all the trouble and exertion; we had been miraculously, as it were, lifted out of modernity and set down in the midst of medievalism.

Our guide book furnished the information that: "The superb castle of Josselin, comparable to nothing else so much as Warwick Castle, in England, was founded about the year 1008, on a site very defensible and very holy; for more than 3 centuries it was a pilgrimage shrine of great sanctity and renown." We found the castle still an imposing and fascinating institution, whether viewed from across the river or from inside its enclosure, and the town is still the focal point of great religious pilgrimages; one of the most interesting being those curiously picturesque "Breton Pardons" which have been held annually, unchanged in character, for several hundred years.

Clara Laughlin describes such celebrations, as follows: "Usually a pardon has 3 phases: the eve; the religious ceremony; and the merrymaking. The eve is devoted to confession and prayer, the pilgrims flocking in from every direction. They come bareheaded, barefooted, and usually fasting, followed by crowds of the lame, the halt, and the blind. There is a sermon, drinking at the holy well or other miraculous source, and a torchlight procession. Next day there is the ceremony which is the distinctive feature of that special pardon—the blessing of the sea, of the boats, of the cattle, or whatever it may be—followed by the procession wherein every one wears the rich, picturesque costumes that have been handed down for generations and are kept stored in old carved chests, except on such occasions as these. And in the afternoon there is a fair, followed by dancing and drinking and courting."

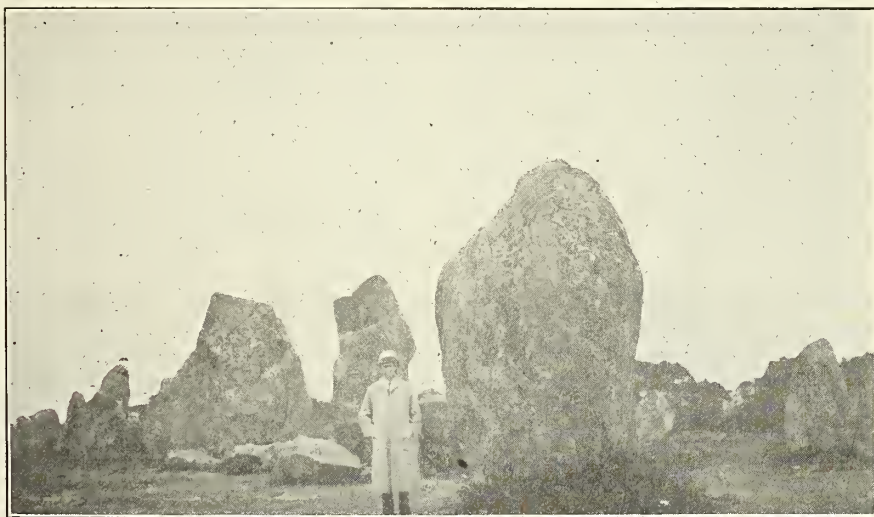
We were not so fortunate as to be there on Josselin's greatest feast day but a similar event of lesser importance was held on the Sunday morning succeeding to our arrival on Saturday evening and we had full opportunity to enjoy our first observation of the quaint



dress and customs of the Bretons. Armed with Kodak and Filmo, we began at once to acquire snapshots and movies of people, events and dress entirely new to our experience.

Of the castle much might be said but we must be content to locate it in your memory cells by recalling some historic events with which it was connected. It was from here that Jean de Beaumanoir issued his challenge to the English which resulted in the famous Battle of Thirty—30 knights on each side to meet on a certain Saturday in March 1351 and settle their disputes by mortal combat. The opposing forces met between Ploërmel and Josselin, at a point still marked by a cross and pyramid, and of the 30 Bretons only 3 were slain, while the English suffered a loss

ent guide will show us a photograph of the late Duke, killed in the Great War; and perhaps one of the young lad who now bears the title. It may be that we shall catch a glimpse of the duchess, in her garden, writing letters or reading. (We did see her, quite by accident, Sunday, September 7, in the morning sitting in the shade of a tree knitting, and in the afternoon leaving the grounds for a drive.) Her mother-in-law, who died in the early part of this year wherein I write, was a great lady of many distinctions; her salon in Paris was one of the most distinguished of recent years, and her ardent interest in the arts is carried on by her daughter, Princess Murat, whose little art exhibition and tea room you have probably visited in Paris—on the Quai d'Horloge and



1. Menhirs—Ancient Memorial Stones at Carnac.

of 12 on the field and those left alive had to beg for quarter and accept imprisonment in the castle at Josselin. The glory was all to Beaumanoir, but he was seriously wounded and it was not long thereafter when the great Olivier de Clisson married his widow and became master of this castle, reigning there until 1407 and his remains resting now in the neighboring church. "His son-in-law and successor began the transformation of the fortress into the most elegant residence in all Brittany. And through the courtesy of the widowed châtelaine, the Duchesse de Rohan, mother of the little Duke, we are permitted to visit the castle. A fine old servitor, bursting with pride in the great lineage and the true *noblesse* of the family he is attached to, shows us the imposing dining-room with the great equestrian statue of Olivier de Clisson, done by Frémiet; the salon, with its superb mantelpiece; the library, with the table whereon the edict of Nantes was signed. The rever-

Place Dauphine, where Manon Roland grew up. Few of the great old feudal names of France are more familiar in American and English ears than that of Rohan."

With the kindly aid of the hotel proprietress—who would not permit an imposition upon her guests, but insisted on the garage man fixing a fair fee (considerably less than his first named price) for the trip—we were driven Sunday afternoon, in an ancient Ford car much worse worn than the Eleventh Century Castle, 20 miles to Vannes where our real Brittany trip was to commence next morning. But, in that glorious country one is constantly meeting surprises, and that Sunday afternoon we arrived in Vannes just in time to witness its annual festival and church parade in honor of St. Vincent; an impressive event which we were fortunate enough to record on the film of our small moving picture camera.

It would take up too much space to tell you all the joys of our trip through Brittany, joys

about which we have reminisced many times since and of which we do not tire talking; so, we shall have to confine our ravings here to the "high spots", after expressing a general summary in the single statement that any traveler can find entertainment, instruction and pleasure in that arcadian area. The archeologist, the historian, the antiquarian, the humanitarian, or just the plain tourist, will secure incentive for research and happiness in his findings. The Bretons are a simple, honest folk who learned centuries ago a satisfactory philosophy of life and they do not disturb themselves today to chase after false gods. Just one example will illustrate our meaning.

Brittany (Bretagne, in French) is that section of France which projects into the Atlantic Ocean, in the form of a peninsula, from the northwestern corner of the country, with the English Channel bathing its northern shore and the Bay of Biscay on the south. Some of you who served in the A. E. F. will remember it well because of having disembarked or reëmbarked at the port of Brest; and if you spent any time in the "rest camp" of Pontanezan Barracks just outside that city you will recall that because of the geographic location it rains there during some portion of nearly every day—no matter which way the wind blows. France is divided into, or is composed of, *Departments*, just as our own nation is composed of *States*. Bretagne is the ancient name for that portion of French territory which comprises present political departments of Finistère, Morbihan and the Cotes-du-Nord. The total area of Brittany is approximately that of our state—New Jersey—and the city of Brest, on the extreme western boundary, is less than 500 miles from Paris.

Now, remember that Paris has been for many centuries the *fashion center* of the world, and that the great mass of so-called *civilized* people of Europe, Asia, Africa, North and South America follow the dictates of the Parisian dressmakers and milliners; and yet, Brittany—French to the core, and located at the very door of Paris—has remained through all these centuries unaffected by the changing styles in dress. When "dressed up" the men wear black velvet coats ornamented with silver buttons, knee breeches, long stockings, silver-buckled shoes, and flat derby hats with long silk ribbon streamers hanging down their backs. The women, too, still adorn themselves in the ancient costumes of black silk dress and starched white linen caps; and it is said that if familiar with the variations in shape and form of these caps you can tell from what portion of Brittany—even from what parish—the wearer comes.

How sensible! Costumes that meet all the essential requirements: comfort, beauty, utility, economy. Clothes are worn so long as they remain presentable; not cast aside because some arbiter of fashion has decreed a change; and the fascinating linen or lace caps are washed and ironed and utilized for an indefinite period of time, instead of being thrown away because the seasonal calendar has moved from spring to summer. In our opinion they show more sense than those of us who deem it necessary to change hats and dresses as rapidly as new styles can be devised.

Do not imagine that because these people adhere to the old style costumes they are "backward" in all respects. You will find that they live well, know how to use telephones, radios and automobiles, make use of modern machinery, and are fully awake in the transaction of business. They simply follow the excellent advice given by St. Paul—"Try all things, and hold fast to that which is good." We sincerely wish our own people would emulate the example. And, if you doubt whether a people living so simply can still produce virile physical specimens and gigantic intellects, remind yourselves that Foch and Clemenceau both belonged to Finistère and were duly proud of the fact.

On the circular tour we kept close to the coast-line so as to observe the world-famous sardine fishery ports on the south shore, the rugged, rock-bound, western shore, and the summer resorts and bathing beaches strung along the north coast all the way to Mont St. Michel; running inland occasionally to visit the renowned cathedrals and "calvaries", some of which date back to the eleventh, tenth and even the eighth century. Among the many curiosities and artistic monuments encountered were the *menhirs* (Fig. 1.) (tall single stones) and *dolmens* (huge, flat, table-like arrangements) to be seen on the first day at Carnac; acres of otherwise barren land covered by stones (some of enormous size), more or less regularly distributed, as if this may have been an ancient tribal burying ground. Of prehistoric origin, these orderly collections of monoliths have been discovered in various parts of the world and we had on this very trip already seen similar specimens in Ireland.

Concarneau and Douarnenez are the chief French ports for collection, canning and distribution of sardines, and we had the good fortune to arrive at each port just as the fishing fleet was coming home—one of the most picturesque scenes imaginable. The boats are not unlike our own fishing smacks as to size and shape, carrying 1 or 2 masts and



sometimes equipped with gasoline engines, but the appearance of the fleet is quite distinctive and far more beautiful because of the colored sails and nets. The net used for sardines is naturally of very small mesh, and it is colored sky blue to match the deep sea water, rendering it less easily distinguishable when immersed, and thus to fool the fish. The sails are stained by a coating of ochre dissolved, or suspended, in gasoline; the sail-cloth being spread upon the ground, a bucket of paint is sloshed upon it and spread over the surface rapidly by a workman with the aid of a broom; the oily mixture soaks into the canvas and the excess of oil evaporates, leaving its stain. The result is sails that vary in color from light orange to red-brown, and when the boats come

will further recall, an Italian salvage crew was successful in locating the sunken gold and its divers had so far advanced the work of rescuing the money as to be hauling up the safe in which it was deposited, when a new storm intervened, destroyed all the carefully developed plans and works, and drove them from the scene; leaving the golden fortune still somewhere in Davy Jones' locker. We were, naturally, greatly interested in reading about that storm because it occurred only a week after our visit to that coast. The terrible damage done by such storms, the terrific loss of life they impose upon the fishing fleet, and the sorrows inflicted upon the women and children of fishermen's families, were forcibly brought to our attention at the time. At



2. Sardine Fleet at anchor at Douarnenez.

into harbor with nets hanging from the masts and booms to dry, and sails spread with a background of sky and the setting sun, a picture is produced that will long be remembered.

From Quimper we made a side trip to Pointe-du-Raz, a wild, rocky promontory of the western coast which is the bane of all sailors and deep sea fishermen compelled to navigate that section of the Atlantic Ocean. As a means of locating it for you, we may remind you that it was in this vicinity that the British ship sank, during the World War, with \$5,000,000 in gold coin locked in her coffers; and, also, that it was at a lighthouse upon one of the many dangerous rock islands off this coast that the lightkeeper and his assistant were practically marooned for 60 days in the winter of 1929-30 because continuous stormy weather prevented any boats approaching the spot with supplies. Last year, you

Douarnenez we had commented upon, and taken pictures of, the womenfolk—some with babes in arms and older children playing around them—sitting in groups on the piers, industriously engaged in knitting and gossip while awaiting return of their husbands and lovers with the sardine fleet. One week later a terrific storm suddenly arose, demolished a score of boats upon the rocks and took a heavy toll of human lives. We could mentally picture those same groups of women and children weeping, pathetically scanning the horizon for signs of their particular boats, praying for the return of husbands, lovers and fathers who would never be seen again upon this earth; and memory reverted to that touching poem—"For men must work and women must weep."

The castles, cathedrals, religious monuments and ceremonies to be visited or witnessed on such a tour are numerous and of great inter-

est. The records of historic characters beset one on every hand. At Saint-Malo we slept and ate in a hotel one section of which was once the home of Chateaubriand. At Tréguier we could pay our respects to the birth-place of Ernest Renan and inspect the room where he wrote some parts of his *Life of Jesus*; and an excellent statue of him stands today in the public square.

Returned to Paris, we made it our business to inquire into the new National Health Insurance Law which had just become effective on July first. Because the law is so new and only beginning to come into effect, we cannot make for you an analysis of conditions comparable to that we made last month for England. We can only present at this time a brief abstract of the French law, setting forth the main features of interest.

In France, even more markedly than in England, the government has been for the past 20 years under control of the labor party or of political parties having a strong socialistic leaning, and the very natural effort to enact legislation of this character has progressed slowly but steadily until the law reached its present form. Also, in France as in England, the medical profession has fought an obstinate, losing battle. Although the law, as finally promulgated, was modified at the behest of the profession, it is by no means satisfactory and there is much complaining on the part of practicing physicians and very little evidence as yet of an inclination to cooperate or even to submit gracefully. In addition to the orthodox form of organization for scientific discussions, the medical profession in France is organized into "syndicats"—on a basis similar to labor unions—for dealing with the government and with economic problems in general. In consequence, it is the *Syndicats Medicales*, rather than the Academy of Medicine, that engage in the controversy and that enter into contract for medical service to those insured under the health law, or—*Loi sur les Assurances Sociales*.

The insurance law is applied *compulsorily* to all employees, of both sexes, less than 60 years of age who earn not more than \$600 per annum; to any employee having 1 dependent child and whose salary does not exceed \$680—or \$800 if living in a city of more than 200,000 inhabitants; to any employee having 2 dependent children, and whose salary does not exceed \$760—or \$880 if in a city of more than 200,000 population; to any employee having 3 or more dependent children, whose income does not surpass \$1000—without regard to distinction of locality. Such insurance is available to, but not compulsory to, children who perform salaried work not forbidden by

law; children who work at home without specific salary but for the benefit of the family; and, all members of the family of an agricultural worker so long as they work and live with him without receiving remuneration in money. In order to become compulsorily insured it is necessary to be salaried. The earning capacity of the optionally insured, with reference to insurability, is measured by the same scale as given for the compulsory classes.

The insured person chooses his assessment according to the benefits he wishes to obtain, but this may not exceed 10% of his annual salary nor be less than \$9.60 per annum except where he desires only to cover the old age pension provision, when the low figure is \$4.80 a year. The insurance fund is used to provide for medical attention during illness, for absence from work on account of disability resulting from sickness, for a maternity period commencing 6 weeks prior to delivery and continuing until the mother is restored to normal health, and, for old age pensions—health benefits terminating and pensions beginning at the age of 60. There is special provision for optional insurance of non-salaried wives of compulsorily insured men, and for women who may become widowed or divorced. There are also special rulings applicable to veterans of the World War, with special reference to other aid they may be receiving in the nature of medical care or disability pensions; in other words, the "law of social insurance" is coordinated with previously enacted laws for medical assistance, maternity aid, free service to ex-soldiers and pensions.

Sickness insurance covers all forms of illness—without distinction between accidents and so-called natural causes—surgical operations, dentistry, and even care at thermal baths and "spas" when considered indispensable. If the patient is to be treated at home, he has "freedom of choice of doctor, surgeon, specialist, dentist, druggist or midwife, under the sole condition that the attendant selected shall be properly qualified". The patient who must be hospitalized has free choice of the institution he will enter but thereafter is subject to the qualified members of the staff of that establishment. All legally qualified practitioners of medicine in France may enroll for insurance practice but no physician is compelled to accept such service, save in so far as common decency would dictate in cases of emergency. As in Great Britain, negotiations between the insured, the physicians and hospitals, and the government are carried on chiefly through insurance companies; the insured selecting the "association" with which he desires to be affiliated, with the sole limita-



tion that it must be an association doing business in the local section or department where he is employed; and, such an association may be formed by spontaneous grouping of insured persons. There is a council of administration to supervise the insurance associations, composed of 18 members, of whom at least 2 must be physicians elected from a list submitted by the medical profession. General control of the insurance plan is vested in the Minister of Labor, with certain definite relationships to the Minister of Finance.

Elaborate machinery is proposed for recording and checking reports of cases, and severe penalties are impossible for malingering or false statements regarding illness or disability; advantage having been taken of experience with such laws for a number of years in the section of Alsace-Lorraine.

We can imagine a number of questions you would like to ask and we regret not being able to volunteer the answers now, but, as previously stated, the law has been in operation for a few months only and we are not sufficiently wise to predict with certainty how it will work. The probabilities are that time and experience will effect some changes in the law, and that physicians will come to feel less antagonistic to the whole scheme than they have been.

With this letter we terminate our report of last year's travel observations but we may, possibly, because dealing with development of health insurance laws in other countries, supply one more letter to present you with some information that has drifted into this office from Canada.

## Medical Ethics

### "WHO STEALS MY PURSE STEALS TRASH"

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, New Jersey

What is there in a name? None can say. If your name is for sale, you must know its value. It is surprising to see the low value of some appraisals. The owner is himself to blame when he holds his name too cheap. It should give us pause to think how thoughtlessly and how carelessly we sometimes lend it. And like other loans, we may not get our name back; and even when it is returned, it may be tarnished, and in that case we surely do not get it all back. Or, on the other hand, when we get it back it may be unduly inflated or it may be polished to an undesired

lustre. In this case also the ledger shows profit and loss; although the writing may be hidden, it is *in red ink* just the same. This can be true even when the name becomes a very noisy one.

But, you will say, anyone can write a few abstract platitudes; they are not real facts. Let us now look at some concrete statements which are facts and are surely not falsehoods.

A prominent New York City Judge blandly admits even this winter on the witness stand receiving \$1000 cash for endorsing a much exploited brand of yeast. The value of this endorsement is much enhanced by its accompanying photograph of the judge in all official robes; the underwriting gives the name and official title. Was the price \$1000 too cheap or too dear? Who knows?

"Nuxated Iron" once had an extensive sale as a tonic and strengthener because it was endorsed by Jess Willard, the prize-fighter. We are not told how much Jess got for his name. But the advertisement fell flat (after telling the public it was the cause of Willard's strength) when the fighter was knocked out. Possibly in this case Willard got more than his name was worth. Was it not a racket?

Almost a half-score supposedly nose and throat men are now pictured in the daily press, each wearing a head mirror *with not one patient in sight* and the invaluable information is given that nose and throat doctors endorse a certain brand of cigarettes. Do they? Another racket? Furthermore, we are told (the voice invading even our firesides) that over 20,000 doctors endorse another brand of cigarettes because "they are toasted". Do they? Is this still another racket?

The writer with hundreds of others (perhaps thousands) received, gratis, a very large package of cigarettes from a certain manufacturer of a popular brand with request for a written statement of the enjoyment afforded thereby. Did the manufacturer get it?

It is now getting almost too common to read endorsements. It is quite funny to believe or ask if people are really taken in and if they think that the endorsements are given "on the merits" of the goods. Do not we know that they are given for cash or value received?

All the cults have their endorsers, even by the thousands—then just consider the beauty creams and the number of patent medicines that are endorsed over the signature "it cured me".

There is no end to this "racket" game—it pervades not only evil doers but all our modern life. The spirit pervading our "modernistic" morals, like our present day modernistic art, is after all nothing but a racket. It is distorted, grotesque and unlovely, and we

come into the picture when we give it our own names.

There is the usual trite (but true) warning for us to avoid putting our property in jeopardy by our endorsements. But many an honorable name has in this way been innocently dishonored and much property has been lost.

Pressure of friendship, social, political, and even of family influence leads us to give our name to certificates of ability or *disability* or of some promised benefit. This we are told will be of great benefaction if not to ourselves, to others.

Even our charity is made a weakness. Hidden away almost out of sight is some diabolic joker to keep all concerned within the law, whereas, if justice were served, the law should take its course.

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## Esthetics

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### CONSIDER THE DREAMERS

(From the *Kalends*, Williams and Wilkins Co.)

Behold, this dreamer cometh. And Joseph's brothers laughed—until they were hungry. Then it was that they discovered that Joseph had all the corn—cereal, be it understood. And he had the corn because he dreamt dreams that were worth the dreaming. Be not too severe upon the dreamer, for dreams are part of all achievement. The course of our present civilization itself was charted by dreamers; by men with clear vision and simple sincerity, who dared strive and fight in the face of all opposition with a tenacity that would not be subdued.

Jesus was a dreamer, and his dreams have inspired men to heroic deeds and influenced the course of history in a manner such as no other man's life has ever done. And yet his dreams even today are but half interpreted. Columbus was a dreamer, but his castles were not built in Spain. Pasteur was a dreamer, but his dreams were not of gold and renown. Ah, no! The dreams of such dreamers were rooted, deep rooted, in ideals and purposes. Such dreams and their dreamers' achievements gave the world a doctrine of hope, gave America to the world, and helped vastly to make *all* of the world a better place to dwell in.

Sad it is, in a way, that so few dreamers live to see their dreams come true! Most of the greatest of them, as is attested by history, were halted midway between conception and realization. Life is too short, it seems, to

realize many of the dreams that are worth while; the best most of us can do is to fling the torch to others, and cry the age-old challenge of "Carry on"!

To many of us may and will be denied the incomparable thrill that comes with complete fulfilment of a life's dream. Few are so fortunate as an Edison. Yet, if we have dreamed dreams worth dreaming, our dreams will not have been in vain; for we will have kindled a spark of inspiration in the hearts and minds of those who follow in our paths—our sons, our daughters, and their children.

No life, no business, no nation, and no civilization but what, after all, is built almost entirely of the stuff that dreams are made of—ideals, intangible strivings, long-time dreams, and adherence to self-sacrificing principles, all of which must be paid for in advance with no assurance of return. Our dreams, our hopes, and our aspirations may not be, relatively, as vital as those of the master dreamers of the ages, but as individuals our dreams are no less important. While it is true that *all* things for us will fade into insignificance with the coming of tomorrow, it is also true that tomorrow never comes unto our children and their children until our yesterdays are but a memory—the stuff of dreams.

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## Collateral Reading

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### SOME NEW BOOKS

(Reviewed by the Editor)

Having explained in our last article that Santa Claus had supplied us abundantly with reading matter for the winter evenings, it seems necessary to report at this time upon the pleasure and satisfaction already derived from those gifts. Perhaps we ought to be ashamed to say that we found ourselves reaching first for the smallest sized volumes in that collection, but we are delighted to report that the very smallest book proved to be a treasure.

DOCTOR AND PATIENT

by

Francis W. Peabody, M.D.

Having thoroughly enjoyed this book ourselves, we are strongly inclined to recommend it to physicians or members of physicians' families who have occasion to make a small gift to some practitioner of medicine. The book costs but \$1.50, comprises fewer than 100 pages, and consists of 4 essays written by the late Francis Peabody and collected recently



for publication by some of his friends. As he was a distinguished physician and a well loved teacher, active practitioners will delight in the sane advice offered in these essays and the sound judgment displayed in everything that he has heretofore recorded. This group of papers deals particularly with his views upon the relation of the physician to the public, proper care of patients, interest in scientific laboratory work and the attitude of medical teachers, calling upon each such teacher to be what he indicates as "the soul of the clinic". The last essay, alone, is worth the price of the book, as it consists in an expression of his personal views through the medium of a letter to his close friend, Professor Longcope, of Johns Hopkins University.

#### OUR NEW PROGRESS

by

James Bayard Clark

The second smallest book in the collection proved also to be extremely interesting though it dealt with quite another aspect of medical interest. Our new progress is essentially a study, an analysis, of the recent period of "great prosperity" and attempts to answer the question—What is our new prosperity worth and what hope for happiness and contentment does it hold? As most of the alleged prosperity seems to have vanished, interest in answering the question now is to be found mainly in the hope that in the future such a calamitous prosperity may be avoided. Reviewing the effect upon different classes of society produced by the modern craze for financial success, the author makes a very happy reference to our profession as follows:

"As civilization stands today, the profession of medicine has a great deal to do. It has, indeed, made it possible for civilization to take on the form it now parades in. Whether this is entirely creditable is another matter. The fact remains, however, that large cities, industries, wars and commerce as they are at present conducted could not be maintained without the aid of this profession. And to its credit it has stood out pretty well against the enveloping movement of the industrial forces. It is a profession fiercely jealous of its individuality, for it knows that two-thirds of its therapeutic value lies in the influence of personality. As a class it is no more interested in the amassing of money than is the teaching profession. This collection of circumstances has made the medical profession an exceedingly awkward segment of society for industry to embosom; yet industry has not been without accomplishment in this regard, thanks to its ally, charitable endowments."

Having gained somewhat in strength, spiritual as well as physical, we felt able to tackle an 800 page novel with a fancy wrapper done in red, blue, green and yellow and carrying a title that was at least intriguing.

#### WOMEN AND MONKS

by

Joseph Kallinikov

The jacket blurb describes this book as a tremendous panorama of Russian life during the period between the years 1905 and 1917, including in the last portion of that period events attending upon the revolution. It purports to reveal "the low down" on life in monasteries and convents in Russia, student life in St. Petersburg with particular reference to development of revolutionary fire brands, the brutal character of life among peasants, and the effects of commencing industrialism in the Russian cities. It must be admitted that, from the literary standpoint, the book is well written, but one may very well ask *why* it was ever written. Fully 50% of the book consists in recording the licentious relationships between the monks and the women with whom they came in contact, either within or outside of the monasteries, and the similar loose life of the university students. If a small fraction of the statements herein presented be true, one may better understand the present determination of the Bolshevik Government to antagonize in every way religion and religious institutions. It is highly probable that the basic factor of truth has been grossly exaggerated in the construction of a novel designed to set forth such truth. At any rate, inasmuch as the author and his backers insist upon the truthfulness of the picture written, we may accept it as in some respects measurably descriptive of conditions precedent to and conducive of the revolution that took place. And in that respect reading it helped to put us in a better position to appreciate the next book in the collection.

#### SOVIET RUSSIA

by

William Henry Chamberlin

Here we have a book that deserves to be read by every American who has any wish to know what has happened and is happening in Russia. Chamberlin was for many years, and we believe still is, an American newspaper reporter of exceptional talent stationed in Russia. He seems to know intimately the people and their language and he reviews the progress of events from the downfall of the monarchy, through the Kerensky period and establishment of the Soviet Republic, up to the commencement of 1930. We shall not at-

tempt to review the book—not even to quote from it extensively—because you will want to read it in full if you are at all interested in ascertaining what progress the Soviet has made up to date. It is by all odds the most authoritative, and the most satisfactorily written, exposition of the plans, efforts and degree of success attained toward the establishment of a government based upon and absolutely controlled by the proletariat—which as used here is but another name for the union of working men.

One phase only shall we specifically refer to, and that because it deals with medical practice under the Bolshevik Government. Regarding medicine we may quote from Chamberlin as follows:

"Nikolai Semashko, a country doctor before the Revolution, has built up an extensive socialized health service. He is especially proud of the achievements of his Commissariat in the field of preventive medicine, and in reducing the formerly high rate of infant mortality. \* \* \* \* \* The Commissariat for Health plays an important rôle in the Soviet Union, because medical aid there has been largely transformed from a private to a public function. The Commissar for Health, N. E. Semashko, stated that during 11 months of the year 1927 a total of 49,435 workers and employees went to private hospitals as against 14,000,000 who received treatment in state hospitals and dispensaries. The worker's average expenditure for medical aid during this time was 23 kopecks (11½ cents) most of which sum went for home medicines. During the year 1926-1927, the state spent, on the average, 30.84 rubles (\$15.42) on medical aid to each worker's family.

The Health Commissariat is inclined to take special pride in its work for the prevention of disease. At the time of the celebration of the tenth anniversary of the establishment of the Commissariat for Health, in the autumn of 1928, Dr. Semashko declared that 2000 doctors were employed in the field of protecting the health of children through regular physical examinations of school pupils, inspections of the sanitary condition of the schools, encouragement of physical training, etc. A good deal has been done in the way of investigating occupational diseases of factory workers, and a number of experimental sanatoriums are maintained in this connection.

In medicine, in the provision of hospitals, clinics, and sanatoriums, as in so many branches of Soviet life, one is forcibly struck by the impression of leveling. Existing accommodations are, as a rule, inferior to what wealthy or even middle class people would command before the Revolution. But workers and the poorer classes who could not in

pre-war times have afforded to pay the fees of private doctors and hospitals now receive a much larger share of free medical attention. The health of the population as a whole seems to be better than was the case before the war, if mortality statistics represent a fair criterion. The death rate in European Russia in 1913 was 27.4 per thousand. In the European part of the Soviet Union in 1926 it was 19.9 per thousand. There has been an especially marked decline in infant mortality, due to legislation for the protection of mothers and babies. The country has also been free during recent years from the terrible scourges of cholera and typhus, although this may be due in part to the fact that these epidemics were so widespread during the period of civil war that a considerable part of the population acquired relative immunity through contracting the diseases."

Chamberlin refers to physicians being over-worked under the new system but gives us little information upon which to base even a guess at the effect otherwise upon the profession.

## In Lighter Vein

### Breaking Up

"What is the best thing to do when the brakes of one's car give way?" asks a motoring correspondent. Hit something cheap.—Everybody's Weekly.

### They Don't Satisfy

A New Jersey doctor says there are fewer girl sopranos since women started smoking. That's the greatest argument we've heard in favor of women smoking.—Southern Lumberman.

### Labor-Saver

"Wouldn't you be surprised if I gave you a check for your birthday, Henry?"

"I certainly would, dear."

"Well, here it is, already made out, ready for you to sign."—Chicago News.

### Honk! Honk!

Driver—"I wasn't going forty miles an hour, nor thirty, nor even twenty."

Judge—"Here, steady now, or you'll be backing into something!"—Rammer-Jammer.

### Economy Plus

"Here comes the parade, and your Aunt Helen will miss it. Where is she?"

"She's up-stairs waving her hair."

"Mercy! Can't we afford a flag?"—Kennebec Journal.

### Jamboree in the Jam

Two little boys were talking. One said to the other: "Aren't ants funny little things? They work and work, and never play."

"Oh, I don't know about that," replied the other. "Every time I go on a picnic they are there."—Boston Christian Register.



## Current Events

### MINUTES OF THE WELFARE COMMITTEE

The regularly called meeting of the Welfare Committee was held at the Hotel Stacy-Trent, Sunday, March 1, 1931; being called to order by the Chairman, Dr. A. Haines Lippincott, at 3 p. m.

The following members were present: Clayton, Conaway, Costill, Dandois, Davis, Disbrow, Ely, Green, Hagerty, Haggerty, Hunter, Lee, Lippincott, Londrigan, McBride, McGuire, McMahon, Morrill, Morrison, Morrow, Nafey, North, Quigley, Schaufler, Schlichter, Sommer, Tracy, and as guests, Drs. Charles B. Kelley and Marcus W. Newcomb. Excuses were received from Drs. Donohoe, Haussling and Sherman.

The Chairman called upon the Executive Secretary for the reading of his report which was presented by Dr. Reik.

#### Report of the Executive Secretary to the Welfare Committee

March 1, 1931.

Since we last gathered in consultation a new legislature has come into existence and we now have to consider an entirely new crop of proposed laws; a new crop, but most of the propositions growing from seeds of the same old hardy perennials. The procedure this year of closing the door against submission of new bills after February 10 resulted in an avalanche of documents on that date, and the Legislative Index lists 243 Senate and 429 Assembly Bills, a total of 672 propositions for new laws or amendments to existing laws. Out of this number we have culled for study 31 (14 S. and 17 A.) which, from their titles, seemed to have some possible bearing upon medical practice or upon public health. We secured and have read all of these Bills and have found that 25 of them should be reported to this committee.

Before taking up the Senate list, we should say that with adjournment of the General Assembly of 1930, the Abell Commission Bills, so-called, in the form originally presented, passed out of existence. There was an agreement, however, that the same or similar bills should have "right of way" in the opening days of the new Assembly. During the interval between the Assemblies of 1930 and 1931, members of the commission and the prospective officers of the new legislature held several conferences concerning this general subject and, as a result thereof, some of the old bills now appear in modified form and some have disappeared entirely. The proposal to combine all of the professional examining and licensing boards under a bureau in the State Board of Education has been dropped; at least, for the time being.

Among the recently submitted bills, S. 22 and S. 24 take the place of S. 260 and S. 262 of last year; that is, they provide for the appointment of a State Budget Commissioner, for paying into the state treasury all moneys received by government departments and agencies and for the method of appropriation of funds to be expended by such departments and agencies. The State Board of Medical Examiners is not specifically mentioned but it would appear to be covered in the provision for state commissions and boards handling *dedicated funds*. The Secretary of the Medical Examining Board will probably inform you today whether this is a correct assumption.

S. 63, S. 137 and A. 61 propose amendments to

the Workman's Compensation Law, and all seem worthy of endorsement; the first named attempts to clear up differences of opinion in regard to compensation for "traumatic hernia", making the requirements more liberal; the second combines 2 existing laws, which have at times occasioned conflict, regarding contracts for employer insurance to cover liability imposed by accidents to employees; while the third extends the time limit for filing claims. We see nothing to complain of in any of these bills.

S. 147 applies to the State Health Department and is said to be for the purpose of providing local boards of health with power to control sanitary conditions beyond the minimum requirement of the general state law.

S. 170 requires the use of distinctive poison labels for containers of wood alcohol or preparations made up in part of wood alcohol.

S. 201 seems to be a health department provision to control the importation of milk and cream into this state.

S. 202 refers to manufacturers and wholesalers who supply drugs, medicines and poisons to general merchants who have no legal right to sell such articles at retail.

None of this last group of 4 bills calls for action on our part.

S. 161 and A. 63 relate to the hospital lien law that was passed last year. The first named would amend that law by striking out, in reference to hospitals, the words "supported in whole or in part by private charity"; the second is a new law outlining the method of procedure for release of the hospital's lien against the patient. We have submitted these to Dr. Londrigan for an opinion.

S. 186 and S. 207 have to do with laws that provide for the care of war veterans. The first amends the existing law so as to permit surgeons of the United States Army, Navy or Marine Corps, or surgeons in the employ of the Veterans' Bureau, to sign certificates of insanity for veterans under observation, and thus to facilitate the handling of such cases; the second provides additional convalescent care for sick veterans upon the "recommendation of reputable physicians".

S. 221 is an annual registration bill for pharmacists but includes provision for limiting use of the terms *pharmacy*, *drug store*, etc., "to places supervised by registered pharmacists".

Assembly Bill No. 1 would make permanent the temporary commission that was provided 2 years ago to investigate the number and condition of crippled children in New Jersey, and provides that the 9 members of the commission shall consist of the Director of the State Department of Health, 1 representative from each of the organizations known as Elks, Rotarians, Kiwanians, Masons and Lions, and, "3 other citizens of the state" to be selected by the Governor. Inasmuch as this bill constitutes a commission "for the care and treatment of crippled children", we suggest the advisability of providing for at least 1 physician in its personnel. The bill says about the commission: "They are empowered to inquire into and ascertain the number, distribution and condition of crippled children throughout the state, and are further authorized to provide for the care, treatment, education, and general welfare of such children." A very large portion of the work of such a commission must necessarily deal with the physical and health conditions of the children, with the diagnosis, prognosis and treatment of medical conditions, and yet no one seems to have thought it necessary to provide for the opinion of a trained medical man. The bill is in committee

and might be amended if you consider it wise to make that suggestion.

A. 29 was introduced by Dr. Newcomb and would amend the school health laws so as to provide for the physical examination of school children, by school physicians, "with the head, neck and chest exposed", under proper conditions. The bill is on the third reading file and should be passed.

A. 36 is a proposition to establish an old age pension system, limited here to those over 65 years of age and unable to support themselves or to secure support from relatives. Whether or not it is a good bill depends upon your personal opinion of socialistic movements.

A. 104 and 105 determine the procedure for consolidating 2 or more hospitals, and we are informed that it is intended to apply to a situation in Newark where amalgamation of 2 institutions has become desirable.

A. 160 would authorize courts of law to order, before or at the time of trial, x-ray examinations for the purpose of using the radiographs as testimony in cases based upon alleged injury to the person.

A. 229 gives school physicians, school nurses, and school authorities (under varying conditions) the right to exclude from the class-room children in an abnormal state of health who might spread contagious or infectious diseases to other pupils.

We have reserved until the last, 5 bills of more specific interest to the medical society, mainly because of their bearing upon the Medical Practice Act. They are as follows: A. 370 is another attempt to establish a Board of Examiners to select and license barbers. This bill is without the old reference to beauty parlors, but it still authorizes barbers to "remove superfluous hairs, warts, moles or other blemishes from the scalp, face, neck or upper part of the body. We think it should be opposed on that ground, though we must say, in addition, that we see no good reason for its passage even as an attempt to *make barbering a profession*—as seems to be the object of its promoters.

A. 205 is our old friend, the bill to increase the rights and privileges of osteopaths, to permit them to use anesthesia and antiseptics, and to practice surgery and obstetrics; though these items are more or less cleverly hidden behind provisions allegedly planned to raise the standards for future osteopaths. It is noteworthy that the term *osteopathy* receives a *new definition* and that throughout the law, amendments would insert the word *surgery* wherever reference is made to the type of practice permitted. The new bill is no improvement over its predecessors, and must be opposed.

A. 207, also introduced by our friend, Mr. Muir, and S. 155, presented by the distinguished attorney who once gave us an enlightening address upon cult practice, Mr. Leap, provide for the licensing of so-called naturopaths. Mr. Leap still desires a license for that personal friend whose great knowledge and industry he so fervently expounded in this room. A. 207 is more liberal in that it would provide a medical license for almost any applicant. It provides for a special board of examiners, to consist of 5 members who may have been for 3 years defying the laws of New Jersey by practicing without a license, and it defines a naturopathic school as an institution "giving resident courses in physiotherapy, *physicultopathy*, *sani-*

*practic*, *physomedicine*, or any other system whose curriculum is "recognized by the proposed State Board of Naturopaths".

A. 264 is an amendment to the Medical Practice Act that would make it mandatory upon the Board of Examiners to issue a license to a person of a certain type—we take it to mean that individual who has been striving so long for this special license.

A. 349 requests the appointment of another member to the State Board of Examiners—a chiroprapist. It is not a bad bill, in itself, and perhaps our action ought to rest upon the opinion of the Board; whether its members desire this addition to their number.

Respectfully submitted by,

Henry O. Reik, M.D.,  
Executive Secretary.

*Chairman Lippincott:* Inasmuch as there are numerous items in the Secretary's Report, it would seem wise to consider them one at a time.

*Dr. Reik:* Taking up these legislative bills as nearly as possible in their proper order, we have recommended that A. No. 1, providing for the appointment of a permanent commission on crippled children, should be amended in such manner as to require the appointment of at least 1 physician on that commission.

*Dr. Morrison:* I move that the Welfare Committee shall seek the adoption of such an amendment.

The motion was seconded and after some discussion, during which Drs. Quigley and Costill expressed disapproval, and Drs. Morrison, McBride and Newcomb urged adoption, the motion was unanimously adopted.

*Dr. Reik:* S. 161 and A. 63, amendments to the hospital lien law, were referred to Dr. Londrigan as Chairman of the subcommittee in charge of that subject.

*Dr. Londrigan:* I am under the impression that both bills are satisfactory and should receive our support.

*Dr. Schaffler* offered a motion authorizing the subcommittee to follow up these bills and to use its own discretion in regard to further amendments; which motion was unanimously adopted.

*Dr. Reik:* S. 186 and S. 207 authorize army and navy surgeons to sign certain certificates for veterans.

After some discussion it was decided not to oppose those bills.

*Dr. Reik:* S. 63, S. 137 and A. 61 all refer to the Workman's Compensation Law and seem to be worthy of endorsement.

*Dr. Morrison* explained that the Advisory Board, appointed by the Commissioner of Labor, and of which he is a member, approved the passage of those amendments. Upon his motion, seconded by Dr. McBride, approval was given to all 3 measures.

*Dr. Reik:* Attention was called to A. 370, the so-called barber's bill.

*Drs. McBride and Morrison* pointed out that this bill might constitute sufficient authorization for barbers to perform minor surgery, and upon motion of the former, seconded by the latter, it was unanimously voted to oppose enactment of this law.



## School Health Department

### NOTES OF GENERAL INTEREST

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton, N.J.

School physicians are asked to make a note of Wednesday, June 3, which is the date for the Second Annual Conference of School Physicians held under the auspices of the State Medical Society. The meeting will be held in the afternoon at the Berkeley-Carteret Hotel, Asbury Park. The program will be announced in a later issue.

No doubt many school physicians are including examination of the feet in their annual health examinations of school children. From information recently received, it is apparent that Dr. Donald B. Hull, of Ridgewood, is devoting close attention to this item. Dr. Hull reports that he is finding a larger percentage of potential foot troubles than we would suppose existed. This Department would be glad to hear from other physicians doing similar work.

At least several school physicians are undertaking the annual examination of teachers. The exact number is not known, but it is evident from the trend of opinion that some day greater concern will be shown for the health of the teacher than is exhibited at present. There is much to be said in favor of this activity.

A news clipping just received announces that Ames, Iowa, has won for the third consecutive year the silver cup awarded through the National Tuberculosis Association to that city in the United States of more than 10,000 population which has the best school health program. The interesting point in the announcement is the fact that the physician's examinations are conducted annually, only in grades 1, 3, 6, 9, and 12. In other grades the physical inspection is given by the school nurse.

The Trenton Board of Education announces the appointment of Dr. R. Grant Barry, Psychiatric Physician, to the Directorship of the Division of Medical Inspection in the public schools. Dr. Barry comes from the State Hospital where he was a member of the staff.

Cape May County is the first county in New Jersey to have the services of a Helping Teacher in Health Education on the staff of the County Superintendent of Schools. Although this appointment is in the nature of an experiment, there have already been achievements reported which lead to the conclusion that the plan will probably be adopted permanently for other counties. Monmouth County followed a few months later with appointment of a Helping Teacher in Health Education who is also a well qualified, experienced school nurse. The prospects for development of the school health program through the work of these young women are very bright.

From Union County comes word that a dentist has been invited by the County Superintendent of

*Dr. Reik:* Your attention was next directed to A. 205, the osteopathy bill, and A. 207 and S. 155, the naturopath bills.

*Dr. McBride* moved that all 3 bills be vigorously opposed, and his motion was unanimously adopted.

*Dr. Reik:* A. 264 is a bill that would provide a special license for a particular individual who has not been able to meet the requirements of the State Board of Examiners.

*Dr. Newcomb* stated that the author of this bill had publicly made the statement that this bill has been endorsed by the Board of Medical Examiners—and he asked if that statement was true.

*Dr. McGuire* denied the allegation.

After some discussion, participated in by Drs. Hagerty, Morrison, Kelley, McBride, Newcomb, McGuire and Lippincott, as to the best method of procedure to counteract the statement reported by Dr. Newcomb, Dr. McGuire accepted a suggestion made by Dr. McBride—that the Secretary of the Board of Examiners should write to Assemblyman Rothermel denying that the Board or its Secretary favored enactment of this bill.

*Dr. Reik:* A. 349, providing for the appointment of a chiroprapist to membership in the Board of Examiners, we thought should also be submitted to that Board for an opinion.

*Dr. McGuire* announced that the Board is opposed to an increase in its number, and thereupon a motion was adopted to oppose the passage of this bill.

*Dr. Reik:* A. 29 is a bill submitted by Dr. Newcomb, which we assume he would like to have endorsed by this committee.

Upon motion of Dr. McBride the committee unanimously approved Dr. Newcomb's bill.

*Dr. Reik:* There remain for consideration only the 2 bills, S. 22 and S. 24, which take the place of the 2 budget bills originally presented by the Abell Commission, and about which we have inquired as to the correctness of our interpretation that they adequately protect the Board of Medical Examiners in treating the Board's income as *dedicated funds*.

*Dr. McGuire* explained that he understood this to be the case.

*Chairman Lippincott:* That concludes our consideration of legislation. Is there any further business?

*Dr. Hagerty:* I would like to present the report of the subcommittee appointed to consider what action should be taken with regard to control of the practice of surgery.

Dr. Hagerty read his report (placed on file) and moved that it be held for publication if and when any bills should be offered providing for the legal control of surgery or the surgical specialties. His motion was seconded by Dr. Londrigan and unanimously adopted.

*Dr. McBride* called attention to the fact that President Sommer had expended the sum of \$100 in the engagement of counsel to represent the State Society, in conjunction with other organizations, at the Public Hearing on Abell Commission Bill A. 304, and moved that the committee authorize reimbursement of Dr. Sommer for that amount from the committee's budget. The motion was duly seconded and unanimously adopted.

The meeting then adjourned.

Henry O. Reik, M.D.,  
Secretary.

Schools to act as an involuntary and unpaid supervisor of school dental clinics. This seems to be a move in the right direction, and the experiment will be watched with interest.

During the winter the writer accepted an invitation to serve as Chairman for Child Health, for the State Congress of Parents and Teachers. The platform as accepted by the Congress is as follows:

(1) To compose a "Bill of Health for the New Jersey Child" and to establish its provisions as the fundamental health objectives in the work of the Congress and its affiliated units.

(2) To encourage the appointment of an active Chairman for Child Health in every unit.

(3) To make available for county and local chairmen type programs and suggested projects, and eventually, to have available a handbook on the conduct of health programs.

(4) To make available for county and local chairmen a synopsis of an ideal school health program in order that local school needs and attainments may be more accurately estimated and better understood, thus making for better coöperation between local chairmen and local school authorities.

(5) To bring about through the state chairman, acting as a clearing center, and with the aid of the county chairmen, an exchange of ideas, plans, programs, etc., successfully tried by local associations.

(6) To serve the units and individual members with respect to information concerning child health, sources of professional advice, available current literature, and child health studies.

"The School Physicians' Bulletin" is the title of the monthly journal of the American Association of School Physicians. This bulletin and the association are called to the attention of school physicians in New Jersey, and recommended for consideration. Although the association is only a few years old, it has a large membership from all over the country. We believe that it is filling a great need and doing a remarkable piece of work for an infant. The dues are \$2 a year, including subscription to the bulletin. The business manager is Dr. William A. Howe, State Department of Education, Albany, New York.

Governor Larson has called a Conference of Child Health and Social Welfare Workers for the purpose of carrying on in New Jersey the recommendations of the White House Conference on Child Health and Protection. The New Jersey Conference for Social Work has been asked to sponsor the organization of the state conference. Commissioner William J. Ellis, President of the Conference for Social Work, is general chairman. The meetings will be held at New Brunswick, in the buildings of the New Jersey College for Women, and probable dates are April 16-18.

Attention of school physicians is also invited again to 2 state publications dealing with the communicable disease problems in schools. One of these is Circular No. 191 of the State Department of Health, called "Communicable Diseases Among School Children"; the other bulletin is "Standards for the Prevention and Control of Communicable Diseases in Public Schools", by the State Department of Public Instruction. These are available without charge, and it is hoped that every school physician will find them useful in constructing local programs.

## State Health Department

### LABORATORY TESTS IN UNDULANT FEVER

D. C. Bowen, Director of Health

New Jersey State Department of Health  
Trenton, N. J.

Ever since undulant fever was first recognized in New Jersey, 2 years ago last month, its diagnosis has challenged the medical profession just as control measures have aroused health departments. Recognition of 39 cases in the 2 years' period indicates that physicians are keeping this disease in mind as a possible cause of prolonged, unexplained fevers. The further fact that the laboratory of the State Department of Health now examines each month for the undulant fever reaction from 12 to 25 specimens of blood shows that many physicians are seeking laboratory tests in cases which they suspect may be undulant fever. Possibly the number of such tests would be greater if all members of the medical profession knew that this service is at their command.

The undulant fever reaction is given by the blood of a moderately advanced case when tested with a suitable antigen. The antigen used in the State Laboratory is the widely accepted one made from *Brucella abortus* organisms, strain No. 80. A specimen submitted for the undulant fever test should consist of 5 to 10 c.c. of the patient's blood, prepared in the same manner as a specimen for the Wassermann test for syphilis. In fact, the outfit furnished for Wassermann specimens should be used. However, the request that a test for the undulant fever reaction be made should be written conspicuously in blue pencil or red ink, diagonally across the accompanying yellow slip; otherwise the special request may be overlooked when the specimen is received and handled with the daily mail, which often includes 200-300 Wassermann containers.

Reactions frequently occur in dilutions as high as 1-1280 in advanced cases. Among 21 New Jersey cases, the titre reached 1280 in 12 instances and ranged from 500 to 1000 in 5 others. Agglutination in dilutions of less than 1-80 are usually not regarded as significant.

Of the 39 cases on record in New Jersey (up to March 15, 1931) 22 have been recognized since July 1, 1930, when undulant fever was made reportable to local boards of health. These 22 reported cases were distributed among the counties as follows: Bergen, 1; Essex, 4; Gloucester, 6; Mercer, 3; Middlesex, 1; Monmouth, 1; Morris, 4; Salem, 1; Somerset, 1.

Those who have studied this disease are in general agreement that the source of infection is animals, particularly cows, hogs and goats, infected with the causative organism of contagious abortion. They are also generally agreed that mankind is infected through close contact with such infected animals, or their carcasses, and also by the use of raw milk containing infection from the cow.

Pasteurization of milk is, of course, an easy way to safeguard users of this food against the infection. Contact with infected animals or meat is not so simple a problem to solve.



# Woman's Auxiliary

## NOTE FROM THE EDITOR

In the February Journal, pages 172-173, we reproduced an article from the Journal of the Indiana State Medical Association and suggested that auxiliary members express to the *Delineator* their condemnation of such advertisements. The President of the State Society Auxiliary, Mrs. John Nevin, acted upon that recommendation and wrote a letter to the Editor of the *Delineator*, which she graciously allows us to print herewith. If all members of the Auxiliary and all members of the Medical Society would follow this excellent example and denounce newspapers, magazines and radio broadcasters for spreading false, misleading and dangerous information or advice there would surely result an improvement in advertising and a saving of innumerable lives—lives that are now sacrificed through the blind faith of readers in their favorite papers and magazines. Thousands of readers accept as gospel the deceptive and fraudulent statements published as advertising matter by fakers and charlatans, and newspaper and magazine publishers are, in our opinion, equally culpable with the quacks, because *they know* that many of the advertisements handled are false and dangerous, and they accept for publication, and lend their support to such fraudulent claims only because their sense of moral responsibility has become prostituted to their cupidity. We hope many of you will rally to this cause. This is a "cause" large enough to supply every auxiliary with work to do. Rid your community in so far as possible of lying advertisements through the local radio station, and help to clean up the advertising pages of the newspapers and magazines to which you subscribe.

Mrs. Nevin's letter was as follows:

Editor of *Delineator*

Dear Sir:

The members of the Woman's Auxiliary to the Medical Society of New Jersey are justly indignant over an article which appeared in the *Delineator* of September 1930, and which has been reproduced in the February issue of the Journal of the Medical Society of New Jersey.

The offending article, written by Celia Caroline Cole, and purporting to advance a remedy for puffing eyes and wrinkled lids, advises an astringent for the puffiness, cream for the lids, eye exercises, etc. All to be followed by an adjustment of the nerves in the back of the neck and backbone by an osteopath.

As President of the Woman's Auxiliary to the Medical Society of New Jersey, I voice the sentiments of hundreds of members who resent the spreading of such fraudulent information, knowing the harm it could wreak on unsuspecting readers. May I suggest that, in order to restore the confidence of discerning wives and families of reputable physicians, a disclaimer or explanation should come from the *Delineator* in order to abate this widespread comment.

Respectfully,

(signed) Mrs. John Nevin.

## PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION IN 4 ARTICLES

### No. 2.—North Central States

Mrs. James Blake

According to the Constitution and By-Laws of the Auxiliary to the American Medical Association, the organization program is carried on by the active work of the Vice-Presidents. Mrs. Southgate Leigh, of Norfolk, Va., is First Vice-President and automatically Chairman of Organization. Due to her location on the map, the Second Vice-President finds herself interested in the destinies of the north central group of states.

Looking backward, with pleasant memories, to Detroit, and forward with delightful anticipations, to Philadelphia, we find this group of states all doing something of common interest.

In the January Journal of the Indiana Medical Society, the Auxiliary President stresses the importance of more constructive work on the part of her organized county groups. "Physicians' wives," she says, in her New Year's Address, "hold an enviable position in being privileged to have a part in a world-wide health program, and I would urge every physician's wife to bring before other women *dependable* knowledge, and a just appreciation of the real spirit and purpose and actual achievements of the medical profession." So, from Indiana we know we are to have constructive work during this year. Physicians as a class are not prone to participate in legislative matters but when 4 separate bills, which affect the profession directly, are presented during one session of a state's legislature, it is time to be up and doing. Such is Indiana's situation this year and the doctors of the seventh district have thought it worthwhile to *instruct* their Auxiliary members on these subjects that their influence may be *properly* used. The Indiana Journal never fails to give the Auxiliary space, and it is little wonder the Indiana women are up and coming, when they have such Editorial Notes to enlighten and guide them in their constructive program work, as one finds in this same Journal.

Kansas is slowly getting a few things accomplished. A world-wide depression has rendered prophets quite fameless abroad as well as at home, but the doctor's wife in Kansas is coming into her own, and we prophesy that the Auxiliary will climb to the top because of the indomitable spirit of the leaders in that state.

In Illinois the motto might well read: "Builders we are, and builders we must ever be. Builders, not in stone that shelters life, but builders in life." We find good constructive programs of well-balanced educational value, we find a Journal ever ready to broadcast Auxiliary news, and best of all we find a healthy organization line-up, and an advisory board from its medical society. Several of its county groups are having the members get busy with the "Health Audit Program." One project of worthy mention comes from Vermillion County on the Eastern boundary of the state. The county auxiliary put on the "Health Institute" in Danville last November. A member from every agency in the county working out any kind of a health program was included in the personnel of the speakers. It was for just 1 day, but it was worth 365 as a rouser for auxiliary work. It really was sort of a Christmas Seal Campaign opening, a get together of Club Women, and P. T. A. groups in the county. And what a wise idea for

a medical auxiliary to have the headlines in the plans for such a "Health Day".

Wisconsin, Iowa and South Dakota are among the latest states to join the National Auxiliary. Organization is the key note for their work, and the National Study Envelopes are offered as program material. Right now if the modern doctor's wife needs to get one thing more than another from her organization, it is the knowledge of what is going on in this world; especially the world of medicine. Women are discriminating more carefully in the clubs they are joining. They are asking what membership will mean to them, what they will get out of it. For that reason the subjects for study should be more carefully chosen, and the roll call should be made to count for something more than jokes and quotations from forgotten poets. It isn't a pleasant feeling for a busy mother who rides miles to a meeting to say when it is all over: "I can't say I know any more now than when I started." And so we find these 3 states getting themselves established on a firm foundation, with the national program envelopes scattered far and wide to aid and encourage Auxiliary members, already in, and prospective members.

Montana and North Dakota are debating pro-and-con but as Mrs. Hoxie said in her Detroit report: "I believe it will be a mistake from now on to organize a new state unless it appears reasonably certain that there is interest enough among the doctors who want the Auxiliary so that they will foster it and stand back of it." And so we leave Montana half-hearted about forming an Auxiliary, and North Dakota in the air.

We find Michigan giving intelligent coöperation with state and county officials. Women, like men, are interested in the improvement of civic affairs and healthful living and are realizing that they need to be armed with a definite knowledge of health laws and public health practices.

Missouri is in a very healthy condition. We find that Mrs. A. B. McGlothlin, the President-Elect of the Woman's Auxiliary to the American Medical Association, will attend President Hoover's White House Conference for Child Health and Protection to be held in Washington, D. C., February 19 to 21. Mrs. G. H. Hoxie, the President for last year, will also attend the White House Conference.

Mrs. A. W. McAlester tells us the women of Missouri are finding the Study Envelopes, published by the Education Committee of the Woman's Auxiliary to the American Medical Association, most interesting and instructive. The studies on "Common Defects in Children", and on "Diphtheria", "Small-pox" and "Typhoid Fever" were recommended by the Department of Health in the Missouri Branch, National Congress of Parents and Teachers for use on Parent-Teacher Programs; 800 copies of each were distributed for use in Parent-Teacher Units; 300 were requested and supplied for use in Parent Education Classes; requests are constantly coming in for additional copies of the studies for use by teachers and Parent-Teacher Units. The Department of Public Information of the Extension Division of the University of Missouri is including these studies in its suggested programs for clubs in the Missouri Federation of Women's Clubs. This department requested back numbers of Hygeia for use in such

programs. Three hundred copies of Hygeia were supplied by women in the state and by the circulation manager and are being extensively used in club programs. The Missouri Chairman of Public Relations is planning to have a copy of each of the studies, "Common Defects in Children", and "Communicable Disease Control", sent to each county school superintendent in the state. Several of the county auxiliaries are using the study envelopes in their programs.

Mrs. M. P. Overholser, of Harrisonville, Mo., has been appointed chairman of Public Relations in the Missouri Auxiliary. This Auxiliary maintains a scholarship for a medical student, per capita quotas being assigned to each county auxiliary. They also have sent in 30% of the total number of Hygeia subscriptions recorded from all auxiliaries from January 1, 1930, to January 1, 1931. Some county auxiliaries provide Hygeia for all their teachers. Among these are Buchanan, Gentry and Lafayette. Cape Girardeau County Auxiliary has just finished paying a \$1000 pledge to a hospital in the city and is now ready for another kind of work. It is a live group and certainly works hard to be able to accomplish so many wonderfully worthwhile things.

Minnesota, the North Star State, has had a busy and successful year on organization. The President and Organization Committee Chairman have visited over the state and planned meetings and educational programs with many county groups. In October the International Medical Assembly met in Minneapolis, and at this time the Hennepin County Auxiliary celebrated its twentieth anniversary, by being hostess for 5 days to the visiting doctors' wives. A great many social affairs and an Educational Day, which included a speaker on public health, were features. Hennepin County is having a year with a definite program. Each month a speaker is scheduled, and 1 meeting during the year is *reciprocity* day and each auxiliary in the state is invited to send visitors. This group features philanthropic work for T. B. patients at Glen Lake and does much for the library at the sanatorium. It has helped the Medical Society furnish its library and club rooms, spending \$1000.

Ramsey County does much the same work. It has a Scholarship Fund for Medical Students. St. Louis County is noted for work in the Public Relations Field. The State Medical Journal gives a page to Auxiliary news. One of the other counties takes care of a Nurse's Scholarship. The Minnesota Auxiliary has a splendid Advisory Board and a page in the State Journal. The President will be one of the speakers on the program for the Annual Conference of Secretaries of the Component Societies of the Minnesota State Medical Association, to be held in St. Paul the first week in February. This is the first time the Auxiliary has been asked to take part in this annual affair. Mrs. Hesselgrave's talk will be, "Uses of the Auxiliary".

And so, closing my review of the work of the North Central Group of States, may I say again—

Builders we are, and Builders we must ever be  
Builders not in stone that shelters life but,  
Builders in life itself—ever remembering the future of the world for generations to come depends upon what we *think* and *will* and *do* today.



## Atlantic County

### A Report from Mrs. W. Blair Stewart

Since the first of the year the county reports have come in very slowly, with but 9 counties heard from—and but 2 have sent in reports for January, February and March. Of course some of our counties only have quarterly meetings. Atlantic and Union Counties have had reports each month. Every Auxiliary should have an active reporter.

Many attended the open Executive Committee Meeting and Luncheon at Trenton, which was a very enthusiastic meeting, as plans were discussed for both the A. M. A. Auxiliary Convention in Philadelphia—June 8-12; and also for the State Medical Meeting in Asbury Park, June 3 to 5 at the Berkeley-Carteret Hotel.

Among the activities reported are—welfare work—the deficient child—scholarship funds—Hygeia subscriptions. There have been flowers and plants sent to the sick or to those in trouble. Card parties have been given to raise funds.

Among those who have addressed the various Auxiliaries were Dr. Harvey Green, Mrs. Taneyhill, Mrs. A. Haines Lippincott, Dr. Ellen Potter, Mrs. John Nevin, Mrs. Russell Shirreffs, Dr. Leo Haggerty, Dr. George N. J. Sommer and Dr. Reik.

Funds are being raised to assist in the entertainment of the Auxiliary Convention in June in Philadelphia.

Friday, the thirteenth, was not in any way a hoodoo day, for the Atlantic County Auxiliary gave a very successful and delightful musicale-tea in the Solarium of Hotel Claridge on the twentieth floor (a sure enough sky-scraper for the seashore!) given to honor our beloved President of the New Jersey Medical Auxiliary, Mrs. John Nevin, of Jersey City. Mrs. James Hunter, a Past-President, was also a guest, both giving us helpful addresses.

The musical program was given by Claridge Orchestra, with Mr. William Stokking as leader. An hour's program of vocal and instrumental numbers was given by Atlantic City talent, mostly from those related to the profession. Delicious refreshments were afterward served.

Claridge Hotel should be called the House of Hospitality, for the management did everything possible to make our musicale a success, even giving the use of its fine orchestra.

Dr. H. O. Reik, Editor of the Journal of the Medical Society of New Jersey, was the speaker at a meeting of the Atlantic County Auxiliary, Friday evening, March 6, in the Blue Room of Chalfonte Hotel.

Arrangements were made for a card party about the middle of April to raise funds. Mrs. Joseph Poland, Vice-President, presided.

After a short business meeting, a social evening with bridge was enjoyed.

This year the Atlantic County Auxiliary mourns the loss of 3 valued members from its family. With Mrs. Beckwith, our President, we mourn the loss of Dr. J. T. Beckwith, who was taken away suddenly. Mrs. Mark Haley was the next whom death called, and now we are deeply distressed at the passing on of our friend and member, Mrs. Samuel Barbash. She had assisted in the organizing of the Atlantic County Medical Auxiliary and was always graciously willing to give of herself and of her talents.

## MRS. SAMUEL BARBASH

The Atlantic City Press published on March 15 an editorial, on the passing away of Mrs. Barbash, of such character that we use it here as a memorial tribute.

The unexpected death of Mrs. (Ann Tomlinson) Barbash yesterday created genuine sorrow in no small group of native Atlantic City folks. The reason was perfectly plain. She had been so gracious and generous in her personal devotion to friendships, to all worthy endeavors in the social, church and musical life of the city, and to the interests of those who were either her friends or for any reason sought her help. While exceedingly active in the historic, fraternal and patriotic societies of all New Jersey, Mrs. Barbash's greatest single contribution to this community perhaps was her success in gathering, keeping alive and helping to preserve the interesting historical facts and traditions of Atlantic City and this immediate section of New Jersey. In this task her energies were tireless and her achievements will endure as of substantial value to this and succeeding generations interested in local history and local genealogical research.

## Bergen County

Reported by Mrs. Michael Sarla

The regular monthly meeting of the Woman's Auxiliary to the Bergen County Medical Society was held at the Nurses' Home of the Hackensack Hospital on the evening of March 10, with 16 members present.

After the business meeting interesting motion picture films of California, Panama Canal, and Honolulu were shown by Mrs. George Finke of her recent travels there. Delightful refreshments were served in which the Bergen County Medical Society joined us.

A public card party took the place of the February meeting and the sum of \$100 was realized. The money will be divided between the 4 county hospitals.

## Essex County

Reported by Mrs. F. J. Conley

The Woman's Auxiliary to the Essex County Medical Society has concentrated its efforts of the past month on the Scholarship Fund. The Theater benefit held on March 9 and 10, at the Lyceum Theater in East Orange, was a most encouraging affair. Our doctors attended in goodly numbers so that social success was added to financial.

At our March general meeting, we hope to be enlightened on the work done by the Visiting Nurses' Association; an address by one of the Association's members.

We were honored by an invitation to attend the March meeting of the Essex County Medical Society at the Library Building in Newark.

## Gloucester County

Reported by Mrs. Henry B. Diverty

The meeting of the Gloucester County Medical Society Auxiliary was held at the Woodbury Country Club, Thursday, March 19, at 9 p. m.,

President, Mrs. Elwood Downs, in the chair. Considering the stormy weather our members were very well represented. Mrs. James Hunter, of Westville, a member of our auxiliary and also of the State Board, brought to us in detail the program of entertainment by Pennsylvania, New Jersey and Delaware Auxiliaries to the A. M. A. Convention, to be held in Philadelphia, June 8 to 12.

A letter from headquarters regarding circulation of Hygeia was read and discussed. After transacting the routine business, we adjourned.

With the coming of the auxiliary and its work a new and greater friendliness has come to us. The atmosphere of our medical people is entirely changed.

The doctors held a meeting at the same hour in another part of the building. After they adjourned, we joined our forces and went to the dining room where a fine collation was served by the Country Club steward, and a very enjoyable social hour followed.

### Hudson County

Reported by Miss Anne Hetherington

The February meeting of the Woman's Auxiliary to the Hudson County Medical Society was held in the Jersey City Y. W. C. A. on Friday, February 27.

It was voted that \$100 be distributed among local charities.

After the business meeting, a talk by Mrs. E. C. Taneyhill, Field Secretary of the Medical Society of New Jersey, on "Mental Hygiene" was enthusiastically received, proving the lively interest this subject is arousing everywhere today.

Mrs. Taneyhill graciously discussed many points of her address with the members during the informal tea hour which followed.

The President, Mrs. John Nevin, again made a plea for a large attendance at the State Medical Society Convention to be held in Asbury Park, June 3 to 5, reminding the members of the attractive plans made for their entertainment.

Mrs. Nevin also presented the social, scientific and historic advantages to be enjoyed at the American Medical Association Convention at Philadelphia, June 8 to 12, concluding her talk with the reminder that every member should consider it a personal obligation to play her part as hostess on the New Jersey Day assigned to the State Auxiliaries.

### Somerset County

Reported by Mrs. Abram Levy

The Woman's Auxiliary to the Somerset County Medical Society held the third meeting of the year on Thursday afternoon, February 12, at the Nurses' Home of the Somerset Hospital.

It was decided to hold a card party in April, the proceeds of which would be used for entertaining at the A. M. A. Convention in Philadelphia.

Delegates were elected for the State Society Convention at Asbury Park. The first delegate is Mrs. Edgar Flint, of Raritan, and her alternate is Mrs. R. K. Adams, of Skillman. The second delegate is Mrs. E. G. Brittain, of Bound Brook, and her alternate is Mrs. Abram Levy, of Somerville.

### Union County

Reported by Mrs. C. A. Hoffman

The first of a series of afternoon meetings was held by the Woman's Auxiliary to the Union County Medical Society in the Winfield Scott Hotel, Elizabeth, on February 16. Nearly 40 guests and members sat down to the luncheon.

The President and President-Elect of the Auxiliary to the State Medical Society, Mrs. John Nevin, of Jersey City, and Mrs. H. Roy Van Ness, of Newark, were guest speakers.

Mrs. F. A. Kinch, of Westfield, a Past-President of the Union County Auxiliary, outlined the spring program. Mrs. George L. Orton, another Past-President, reported plans for entertainment of the Auxiliary members at the meeting of the New Jersey Medical Society, in Asbury Park, June 3, 4 and 5, and those of the American Medical Association, in Philadelphia, June 8-12.

Mrs. H. V. Hubbard, of Plainfield, President of the Union County Auxiliary, presided. At the close of the meeting the following officers were presented: President-Elect, Mrs. Harold Corbusier, of Plainfield; Vice-Presidents, Mrs. Norman Currie, of Plainfield, and Mrs. George L. Orton, of Rahway; Secretary, Mrs. Charles A. Hoffman, of Plainfield, and Treasurer, Mrs. Denis McElhinney, of Elizabeth.

## County Society Reports

### ATLANTIC COUNTY

John S. Irvin, M.D., Reporter

The regular monthly meeting of the Atlantic County Medical Society was called to order at 8.30 p. m., March 13, by the president, Dr. Norman J. Quinn, at the Chalfonte Hotel. The minutes of the previous meeting were read and approved by the secretary, Dr. Joseph H. Marcus.

The names of Drs. Timberlake, Roark and Kline having been approved, they were declared elected to membership.

*Public Health and Sanitation Committee:* Dr. W. Blair Stewart said Don D. Modica, convicted of practicing without a license, was fined \$500 or 200 days in jail.

He brought up the question of advertising patent medicines over Radio Station WPG. This station now broadcasts nightly at 11.30 a talk on patent medicines. The matter will be taken up with Mr. Spence who is in charge of the station.

Last Tuesday evening the Atlantic City Automobile Club took up the question of drunken driving. The general medical profession of Atlantic City has been blamed very seriously upon this question. Any member of the medical society who pronounces a man drunk should stand by his point.

Dr. Scott, one of the oldest practitioners in the city, is ill, and it would be nice if the committee would communicate with Mrs. Scott and offer the services of the society.

*Dr. Senseman* said it was a disgrace to the medical profession the way drunken driving is handled in this city. The Atlantic City Hospital interns cannot pass upon whether a person is drunk or not, as they are not registered physicians, and secondly the hospital isn't a police station. The drunken man should not be sent to the hospital just because the present police surgeon



refuses to do that work. In regard to the broadcasting, the committee will be very willing to take the matter up. Since WPG was taken over by Columbia it is a commercial proposition and we must take this into consideration.

A motion was passed that the society go on record as protesting against this radio broadcasting of patent medicine.

The treasurer's report was declared to be correct, by Dr. Homer I. Silvers, who audited it.

A letter of appreciation was received from Dr. Henry O. Reik, who was elected an Honorary Member at the last meeting.

A motion was passed that the society purchase a copy of "American Physicians and Surgeons" and present it to the library.

Dr. Harvey spoke about a plan which is on the order of "Know Your City Day"; the idea being to sell Atlantic City to Atlantic City and the community. The members of the committee could meet with the Chairman of the Chamber of Commerce. He said that the doctors could join in by giving exhibits of child welfare, an exhibit of x-ray work and baby welfare clinic, tuberculosis and red cross work, etc. The doctors can do nothing as individuals but as a body they could show the health work that is being done here in the city. It must be done under the auspices of the County Society. Booths are being sold in the Convention Hall for this purpose at \$10 per 100 sq. ft. The question that comes into our minds is, do we want to enter it? A motion was passed to appoint a committee to consider the advisability of this. The president appointed Drs. Harvey, Conaway and Silvers.

Dr. Stern spoke about a so-called "racket" being practiced by the insurance underwriters. He said they are sending patients to get treatment at the state rehabilitation clinic at \$1 per patient. He complained bitterly of physicians' fees being arbitrarily reduced by the insurance companies, and made the charge that some members of the society are doing compensation work at cut-rates by contracts with the companies. He thought that the insurance companies should not determine the fees that the doctor shall charge.

Dr. James Mason, who is the State Compensation Commission's doctor for this district, spoke. He said he is in charge of the state clinic and that treatment is given there at the price of \$1 per treatment. In the Rehabilitation Clinic they receive cases referred from other doctors. Cases are also sent from the Workman's Compensation Court, which is a part of the Department of Labor of the State of New Jersey. He read the Act which was passed by the legislature of the state of New Jersey. He then explained that a committee is appointed under this Act to pass upon all disputed medical fees in compensation cases. Dr. Allman is on this committee as a representative of this society. Dr. Pilkington is on it as a representative of the insurance companies and Dr. Mason represents the state. The committees were appointed with the idea of avoiding legal complications. If a physician is not satisfied with the ruling of this committee he has recourse to the Common Law Court. The insurance company doesn't dictate the fee. The Act itself states the fee. Dr. Mason went on to say that as far as contract work is concerned he does a great deal of this compensation work and he has no contract with any insurance company or with anybody and that he charges his own fees.

Dr. Allman: The companies treat you right if you go about it in the right manner. There are some doctors who try to rob insurance companies.

I, personally, know that some members of this society have charged for visits that were never made, and that is why the companies are prone to send their patients to doctors whom they can trust. We do not try to favor the insurance companies nor do we try to "gyp" them. It is much better to go along with them in a friendly manner than to try to get an exorbitant rate and so throw unjust reflection on the whole society.

Dr. Senseman said there is no reason why an insurance company should be robbed. Quite often it receives large bills for negligible services. Therefore, the dishonest doctors make it bad for the honest doctors. The trouble is more often with us than with the insurance companies.

Dr. Marcus announced that on April 10, there will be no regular meeting. Instead, there will be a meeting of the Fifth Councilor District of the State Medical Society at Haddon Hall at 4 p. m. The speakers at this session will be, Dr. John A. Hartwell, President of the New York Academy of Medicine, who will speak on, "The Continued Education of the Doctor", and Dr. Joseph Doane, Director of the Jewish Hospital in Philadelphia, who will speak on "What the Public Thinks of the Present Day Practice of Medicine". The after-dinner speaker will be Dr. H. Sheridan Baketel, Professor of Preventive Medicine in the Long Island College of Medicine, and he will speak on "The Personal Element in Medical Economics". At 8.30 p. m. there will be a Clinic at the Atlantic City Hospital where interesting cases will be shown. Refreshments will be served after the clinic.

Dr. Quinn hopes the members will turn out 100%.

Then followed a talk by Dr. Ernst P. Boas, Associate in Medicine in the Mt. Sinai Hospital, New York, on "Rheumatic Fever".

Dr. Boas. The subject I have chosen to speak about is such a vast one that it is difficult to know what to put in and what to leave out. I felt that rheumatic fever is such an important problem to all of us, in view of the fact that one-half of all cases of heart disease and nearly all cases of heart disease in children are caused by it. Definite knowledge as to its cause is still very scanty.

First of all, I should like to emphasize the fact that rheumatic fever is an infectious disease like meningitis, poliomyelitis and pneumonia. What evidence have we to substantiate this point of view? Rheumatic fever, in its seasonal distribution, resembles many infectious diseases. Over a period of 30 to 40 years this incidence may be high and then again the incidence decreases. There are definite waves that occur, due to an unknown fact. In this latitude the disease exists and begins to get scattering in the fall, but from March to May the incidence reaches its greatest. At the present time we are receiving many cases in our hospital in New York. There is a very interesting problem about the contagiousness of rheumatic fever. Most of us have not thought about it as an infectious disease. It can be transmitted from one person to another. Years ago cases were described of one child developing arthritis and then the mother or some other member of the family contracting the disease. Then some 30 odd years ago there was pointed out the marked frequency of rheumatic fever in families, due to hereditary predisposition. Environment, rather than heredity, determines the high incidence of many cases in a family. In the brothers and sisters and parents who attend my cardiac clinics I found that in their families multiple cases

occurred. Rheumatic valvular heart disease was much more prevalent in rheumatic families. Finally, very definite epidemics have been observed and described.

During the War, the French noted definite evidence of epidemics in regiments. It was not conditioned by environment, as only the originally infected regiment kept on having the disease. I have had the good fortune of observing 2 epidemics in the children's wards of the Montefiore Hospital. In the first one there were 18 boys with old rheumatic heart disease in a ward. One child began with an acute rheumatic infection and then after a month about 8 other children became infected, and several died. The second epidemic was similar. However, this disease hasn't a high degree of contagiousness, like measles. It is like poliomyelitis, in which infection occurs but which is not very common. Environment also plays an important part. The disease is found among the poor. It is like tuberculosis in this sense, where the economic status of the people makes it hard to prevent the disease.

The first point to remember then is that it is an infectious disease partaking of the general character of the general infectious diseases.

If you study the incidence of the disease in the United States and compare the North with the South you will find that going from Boston south it diminishes tremendously. It will suffice to say the disease is rare south of Virginia. In the tropics the disease is almost unknown. I have been interested in studying the incidence in Porto Rico. A large settlement of Porto Ricans live in the vicinity of the Mount Sinai Hospital. Among them we have seen cases of acute rheumatic fever, but with very few exceptions they all contracted their infection after arriving in the United States. I took pains to check up the morbidity and mortality statistics. What is true of Porto Rico is true of the tropics in general. Not alone rheumatic fever but other diseases, such as scarlet fever of streptococcic origin, do not tend to spread. Mouth cultures have shown that the streptococcus is very common there. So the matter is not as simple as it sounds.

Recently some physicians in the Presbyterian Hospital made an experiment. They sent some rheumatic patients to Porto Rico and while they were down there their symptoms subsided. This points to a very practical conclusion in regard to children especially. It may be very wise to advise parents to send their children South. I would send them south in September or October and keep them there until June. This measure is a practical method of treatment of the disease where the patient's means will allow.

The heart needs little comment. We know that when the endocardium is attacked the myocardium is attacked as well. Not the heart itself, but the large vessels are attacked too, even lesions of the pulmonary artery have been described. The lungs are commonly involved in rheumatic fever. A few years ago Nace described rather characteristic rheumatic pneumonia. Rheumatic pleurisy we are all familiar with.

Rheumatic pneumonia is associated with other manifestations. Physical signs are very definite. The brain is also at times involved. Cerebral rheumatism is probably an encephalitis. The peritoneum may be involved. I would like to call your attention to the frequency of severe abdominal pain and rigidity. It is not at all uncommon for a child to be taken with chill, rigidity and pain in abdominal region. Appendectomies have been performed and within a week the patients developed

arthritis. This has been overlooked in recent years, and we seem to have forgotten about it until in the last few years papers have appeared upon the subject. The skin is frequently involved. We have all types of skin eruptions. The subcutaneous tissues are also involved. The anemia of the disease may be due to involvement of the bone marrow. I have enumerated all of these items to impress upon you that rheumatic fever is an infectious disease which may involve any part of the body. In any case the virus is widespread.

What is the etiology of the disease? Very little is actually known. While many observers have been believed to isolate the germ (streptococcus) we cannot reproduce the disease in animals. We do know that it is often associated with tonsillitis. Glover observed a tonsillitis epidemic among 3530 soldiers—427 cases. Within 2 weeks following onset of the tonsillitis he found some 40 cases of rheumatic fever. Schlesinger also made similar observations. It usually occurs from a period of from 10-21 days after the onset of the tonsillitis.

The tonsils have been accused of being the portal of entry. The whole respiratory tract, the nose, nasopharynx, lungs and tonsils are all portals of entry for the rheumatic virus, but I do not believe that any one particular tract is more of a portal than another. I have seen rheumatic fever very frequently in people who had no tonsils but who had attacks of pharyngitis, so I think we are mistaken when we localize too strictly.

Dr. May Wilson and some associates in New York followed the course of 400 children from 1 to 10 years. Over half of these children had their tonsils carefully and completely removed, yet 48% developed rheumatic manifestations. It was found that as the children became older the rate of infection became less. As children grow older they become less susceptible to rheumatic infections. We must regard the whole respiratory tract, upper and lower, as a possible portal of entry, and that even after the tonsils have been removed the patient may get pharyngitis.

Under what conditions and when should tonsils be removed? I believe that the history is important. Not in the hope of preventing heart disease but in the hope of preventing severe follicular tonsillitis. You cannot tell by looking at the tonsil whether it is infected. Tonsils and adenoids that are so large that they make breathing difficult are indications for removal of the tonsils; also otitis media. In years to come there will be less removal of tonsils than there is at the present time.

What lesions may we expect in the heart? The first of these is the immediate heart lesion accompanying the acute infection, an acute myocarditis and endocarditis. In the acute stage of the disease we need not worry about any dynamic effects of valvular lesions. We have to worry about the actual effect on the cardiac function. The heart in order to maintain its work, even when the patient is actually at rest must be quite rapid. These patients react very poorly, even to the very slightest effort. To complete these children's immobilization. I should not have such a child move about in bed or even feed itself, and would watch very closely to prevent even the most minimum effort, as I have seen such children suddenly sit up in bed and drop dead from the effort. These children should be placed in bed for a long period of time. Once the fever has gone down, we send the children home. This is a mistake, as after the fever has been down 10 or 15 days these children should be kept in bed at least a month longer to make sure that their fever will stay down. This is the



only way we can minimize to a slight degree the serious effects.

Then, of course, we have a large number of late heart lesions, the after-effects of acute heart lesions. Are there any cases which recover completely? There are, undoubtedly. There are some who are spared any cardiac involvement whatsoever. There are some who have a definite valvular disease who are fortunate in having only one reinfection, but since they are spared further reinfection there is slight incapacity and as the heart grows with the growth of the child this never again bothers the individual. However, in these cases in which the original valvular defect is slight such defect may in later years be the site of sclerosis sufficient to give symptoms of heart disease. Such cases, I believe, are not at all uncommon.

I said nothing at all about the myocardium. There apparently is no permanent damage here. The acute inflammation leaves a few small scars, the so-called Aschoff nodules. The function of the heart is not impaired.

A few brief words as to treatment and prophylaxis. There is no other disease in which treatment is so unsatisfactory. We have no means of counteracting the rheumatic virus. We have a few facts that are sufficiently suggestive to use as a plan of therapy. I wish to repeat that wherever it is possible for a patient, send him south, with the fairly good assurance that the disease will be arrested after a few months.

I believe that the time is coming soon when the sanatorium treatment of rheumatic fever is going to be adopted just as for tuberculosis. I should like to repeat one word about the tonsils. In some cases it is not only futile but dangerous to remove them. As for medication, there is no medication.

Give the patient absolute rest. While there is an acute myocarditis, digitalis is of no earthly good. It acts as an additional toxin. Salicylate is often given in too great doses. We must remember that it is a chronic disease and that the fever may continue for weeks or months and we must support the patient and feed him. Don't keep these patients on a liquid or soft diet, but give whatever they can stand—anything within reason.

What is the criteria for recovery? When he shows no longer progressive wasting and anemia. The return of the sedimentation time to normal may help. We have no accurate method of attacking the disease. Just as tuberculosis is decreasing, so is the incidence of rheumatic fever decreasing because of the better economic conditions of the public. We know that it is a poverty disease to a great extent and when we have better housing conditions the disease will be less prevalent.

#### DISCUSSION

*Dr. Scanlan.* As regards the removal of tonsils, our hospital staff would be glad to hear your talk, so that they would have fewer tonsils to take out. A few cases never prove anything, but we had a case of a girl suffering from acute nephritis and she didn't show any signs of improvement as time went on. Upon removal of her tonsils her temperature dropped to normal. The same thing happened with a case of rheumatic fever; the girl got better as soon as her tonsils were removed. We had the case of a nurse who was suffering from this same illness, who went home in February to Ottawa, Canada, and I believe that the climatic change killed her. I decided to have my 4 children's tonsils taken out at once. The healthiest child in the bunch, and who is still the healthiest,

had hers taken out, only because the rest were having theirs out. When they took hers out they found that she had an abscess with a green foul smelling pus that no one would have ever dreamed was there.

*Dr. Stewart.* I was just wondering whether Dr. Boas noticed whether during the epidemic of influenza there was any coincident increase in cases of rheumatic fever. I have come in contact with more acute rheumatic conditions in adults than I have with children. I know of a patient whose kidneys were very bad and whose tonsils were supposed to be the best by otologists and laryngologists, and upon operation a very marked purulent condition was found, just as in the case of Dr. Scanlan's child. Some of these bad after-results would be prevented if the children were put to absolute rest. I wish to thank Dr. Boas personally for a most interesting talk.

*Dr. Andrews.* In my undergraduate work, where I studied in a school at the mouth of the Mississippi River, we didn't see a case of this kind among 1000 men and we were curious to know why. We were following a lot of Cabot's work and we didn't know those diseases when we saw them. We learned that they didn't have these cases to deal with much in the South. When I went to Boston I found that out.

*Dr. Davidson* asked Dr. Boas what his opinion is of Small's serum.

*Dr. Barbash.* One thought that struck me as Dr. Boas went over the field in discussing the treatment was that he gave very little encouragement as to any particular treatment. At one time you talked about using serum and you immediately began to brag about the results you got with that particular form of treatment. I saw one case in particular that got better with mercurochrome intravenously and we all know that we have never been able to find one specific cause if there is one specific cause. We shouldn't throw out the various forms of treatment merely because they haven't been of benefit in a specific form of the disease. The idea of sanatorium treatment for rheumatic fever is an excellent one and I believe there is one such institution in Philadelphia and the particular form of treatment as outlined by Dr. Boas is being given there.

*Dr. Quinn* asked Dr. Boas to give some of the school nurses present some hints as to the treatment of chorea and about the various forms of exercise for school children.

*Dr. Boas.* I over-emphasized my attitude about the tonsils in order to drive my point home.

As for Dr. Stewart's question, I am not sure that there was a definite increase of rheumatic fever following influenza. We see patients who, following sinusitis, develop clinical instances of heart murmurs and we don't know whether to call them rheumatic.

Small's serum has not been found useful by any of the men in New York who are interested particularly in rheumatic fever. Just how we are going to treat these patients will depend upon our temperaments. Some will try to keep the patients in good shape and bide our time. Others will get restless. It is perfectly legitimate to experiment around as long as we are not radical.

One can speak for hours of the relationship of the school to the rheumatic child, and it is difficult to bring out the view points that are of the greatest importance. We are faced with 2 alternatives. We must not make the child too heart conscious. On the other hand, we must not allow the child's lesion to go on unchecked, and so these children require very careful handling. The teach-

ers should be aware they are dealing with a rheumatic child. Great care should be exerted to segregate these children from other children suffering with colds and tonsillitis. As far as handling of the acute infection, it can only be a matter of constant attention. What are we going to do with the children who have regular heart disease? In New York they have special cardiac classes. The drawback of this is that the children have their attention fixed upon their illness. Yet, in New York, where the children have to be rushed up and down stairs, it is better that these children be segregated in special classes. The important thing to teach these children is leisure. You can stop pushing the child. In general, children are under too much of a strain. A child with a mild heart lesion should climb leisurely up the stairs, and if he lives too great a distance from the school should not go home for lunch. He should avoid competitive games. When he does play in games and becomes a little short of breath he should sit down. A child like this usually knows when he has had enough. Children don't need regular systematized exercise. This means with the exception of a few older girls between the ages of 12 and 16 who sit around most of the day and don't do anything much at all. Setting-up exercises are a waste of energy.

Children with chorea certainly don't belong in school. Chorea starts in with an acute rheumatic infection and it winds up as a habit spasm and you don't know when infection is over and when the habit begins. Many people believe that only children who have predispositions to nervousness will acquire this habit spasm.

I had the case of a boy of 15 who couldn't even talk, or drink water, as his tongue would go continually. After 2 months we gave the boy a very large dose of chloral and when he came to he tried to move, but as soon as he did so the nurse would quiet him and tell him to lie still, soothingly. He became cured in this way. You will have to look into the conditions of these children at home. They set up a very bad example to other children.

#### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The stated monthly meeting of the General Staff was held in the Auditorium of the Hospital on February 27. The meeting was called to order at 8.30 p. m. by Dr. Milton S. Ireland, President. The Scientific Program was presented by Dr. Walt Ponder Conaway, Chief of the Gynecologic Service, and Dr. J. Carlisle Brown, Assistant.

*Dr. Conaway:* I submit herewith a report of the work performed in the Gynecologic Service of the Atlantic City Hospital, from August to December 1, 1930. During that time 133 patients were admitted; 92 white and 41 colored. Of these patients, 117 were subjected to operations. If a patient had both major and minor operations, it is counted in this report as one. Seven declined to accept our offer of assistance by surgical means and 8 were cured or improved by medical care; a patient with inoperable general pelvic and abdominal carcinomatosis, referred from the Medical Service, died while arrangements were pending for removal to her home in Philadelphia.

An itemized list of operative work is appended. Of the 117 operative cases, 107 patients were considered as cured, 6 improved and 4 unimproved. There were no postoperative deaths. Eight patients were given radium treatments; in 4 the diagnosis

was carcinoma of the cervix, confirmed by biopsy. In the other 4 patients, radium was used for the control of uterine bleeding and in 2 of these it was used as a palliative measure only.

The average number of days spent in the hospital was 11.5 for the white and 15 for the colored patients. One patient from the previous service remained in our ward for 102 days; 1 of our own patients remained 80 days and another 57 days, which increased our average of hospitalization very materially.

Gas-oxygen was used routinely and only in a few cases was this anesthesia supplemented by ether. Two patients were given spinal anesthesia on account of pulmonary and cardiac conditions, which rendered inhalation anesthesia more hazardous. Dr. Johnson, of the Surgical Service, administered the spinal anesthetic very skillfully and both patients made an uninterrupted recovery.

Two patients proved to be of much more than usual interest and I have asked my assistant, Dr. Brown, to report these cases to you more in detail.

Thirty-one consultations were held with members of the Medical and Surgical Service and we were asked to see 13 patients in consultation.

During the last few weeks of our service, we used sodium amylal in 3-6 gr. doses instead of morphin and atropin preliminary to anesthesia, and I am inclined to think the patients were less apprehensive and that they were afforded some protection against the undesirable psychic effects of the operating room. They seemed equally as comfortable and relaxed before operation and there was less postoperative nausea and vomiting.

The X-Ray Department and the Department of Radiology cooperated with us in every possible manner, and I desire to add a special word of commendation for their very prompt and efficient service. The rather plethoric condition of the finances of our Radium Fund is also deserving of some comment. The Hospital Laboratory was of very great assistance. Our requests were answered promptly and the desired reports never delayed.

Our service the past year was the largest we have ever had. The work of our interns was very satisfactory and I was very happy indeed to give them an opportunity to operate whenever possible.

*Dr. J. Carlisle Brown:* We have selected 3 cases which have unusual features that may be of interest. The first case is of a nulliparous married woman who came to the hospital with history of pain of 2 months' duration in the left lower quadrant. Temperature was 100°, pulse 110 and there was a mass 5 cm. in size in the adnexal region. She was able to walk about the wards and did not have an extreme amount of pain. Diagnosis of salpingitis was made, with a possibility of ectopic gestation. The next morning I was called from the delivery room when the day nurse came on duty and the diagnosis was then obvious; she had all the symptoms of severe intraabdominal hemorrhage. The night nurse had apparently failed to notice the condition. She was immediately taken to the operating room and the operation begun, but she almost immediately became pulseless. An intravenous injection of saline was started and 1000 c.c. given. As the pulse was still imperceptible the injection was continued. At 1300 c.c. the pulse became perceptible and the injection was stopped after 1500 c.c. had been given. The operation was finished



as quickly as possible and the patient reacted promptly in the ward. At 2.30 p. m. she was given a blood transfusion. When 250 c.c. had been given the patient woke up and remarked that her heart had stopped beating. She stated that she felt alright but insisted that her heart had stopped. We believe that the large amount of saline was definitely life-saving in this case, and that if we had stopped the injection when a specific amount had been given and before return of the pulse, that she would have died. The patient's own observation of the relief of the cardiac distress due to a low blood volume is also interesting.

The second case is one of those remarkable recoveries of a patient for whom we hold a most discouraging prognosis. We acknowledge that the credit for the recovery of this woman should be given to the splendid coöperation of our consultants on the medical side. This patient had all the classical symptoms and signs of fibroids and pus tubes, with a hemoglobin of 30% and a mitral stenosis which was compensated. She was given a transfusion of 600 c.c. whole blood from which she had a very severe reaction. Rest in bed, tonics, general hygienic measures and a blood transfusion brought her hemoglobin up to 50%. Although she was still a poor risk we decided to operate. What we found was considerably more than we had expected. The omentum was adherent to the front of the uterus, the bladder and the anterior surface of the broad ligaments. The broad ligaments were markedly edematous. The tubes were densely adherent to the ovaries and to the posterior surface of the broad ligaments, and contained pus. The uterus was approximately 12 cm. in diameter and studded with small fibroids. Between the fibroids the uterus was soft and fluctuating; having the consistency of a pregnant uterus with fibroids in its wall. When the omentum was released by blunt dissection a small amount of colon bacillus pus was found beneath each adhesion. As the patient was doing poorly any sort of radical operation was out of the question. Most of the adhesions were released so that a drain could be put in the cul-de-sac. A stab wound was made in one of the fluctuating areas of the uterus and enlarged radically by the finger. A large amount of colon bacillus pus flowed out of numerous pockets in the uterine wall. The cavity of the uterus did not seem to be a part of the abscess cavity. Two cigarette drains were placed in the cul-de-sac and a rubber tube in the uterus.

For 2 days this woman had no pulse at the wrist, her extremities were cold and her condition was extremely grave. She was stuporous and apparently had little pain. On the third day she developed an appetite which I think saved her life. After that third day there was never a day when she could not take a full house-tray.

Several times during convalescence she showed signs of cardiac failure which were taken care of by the medical chiefs. When we consider that this woman had a postoperative hemoglobin of 30%, mitral stenosis, bilateral pus tubes and an abscessed uterus which were left in her, I believe that you will agree with us that her recovery was remarkable.

The last case presents several interesting complications. This was diagnosed fibroids and an ovarian cyst. Her hemoglobin was 30%. A blood transfusion did little good. The operation was a supravaginal hysterectomy, right salpingectomy and left oöphorectomy. Part of the ovarian cyst

was so densely adherent in the cul-de-sac that it seemed a part of the peritoneum. A gauze pack was placed in the part of the cyst wall that it was necessary to leave. On the second day after operation she suddenly developed pain in the chest, especially severe over the heart. The temperature rose abruptly from 101° to 105°; pulse from 100 to 135; respirations from 20 to 30. Shortly after this, the patient became markedly stuporous. Embolism was suspected. On examination Dr. Scanlan found no signs of emboli in the lungs but a definite pulmonic stenosis and mitral insufficiency. The temperature, pulse and respiratory rates gradually returned to normal. On the tenth day the temperature suddenly rose to 101.6° and signs of thrombosis developed in the left leg, which subsided gradually. On the twenty-first day the temperature again rose to 102° and thrombosis developed in the right leg. She had no further distress with her heart. In the light of these later complications it is interesting to speculate if she did not have a shower of small emboli in spite of negative physical signs.

Much has been written recently concerning thrombosis and embolism. In a paper from the Mayo Clinic it was reported that in a series of 1712 abdominal hysterectomies there were 5 cases of fatal embolism—in 1 in 342. There are several factors which seem to predispose to the formation of thrombi in the veins. It occurs, most frequently in gynecologic and obstetric operations especially those involving the hemorrhoidal and pampiniform plexuses of veins. Operation *per se*, by lowering the blood pressure, slowing the rate of blood flow, and increasing the leukocytes and blood platelets, predisposes to this condition. Patients over-weight, of 40 years or older, sedentary habits with evidence of poor circulation, such as edema of the legs and varicose veins, seem especially prone to the formation of thrombi. Infection, too, seems to play a major part. Polak found the incidence of thrombosis and embolism in 12,000 obstetric and gynecologic cases in his clinic to be 0.5%. On the other hand it is well known that patients with high blood pressures, with very active circulations, seldom suffer from embolism. Working on the problem from this angle, the Mayo Clinic has suggested that efforts should be made to increase the metabolic activity and stimulate the circulation in all patients who show signs of circulatory weakness. They prescribe small doses of thyroid extract before and after operation and believe that they are lowering the incidence of this very disastrous complication.

## BERGEN COUNTY

Charles Littwin, M.D., Reporter

The regular meeting of the Bergen County Medical Society was held Tuesday evening, March 10, at the Hackensack Hospital, 60 members attending, presided over by the president, Dr. Joseph R. Morrow.

The minutes of the last meeting and also of the executive committee meeting were read and approved.

Dr. Morrow reported that, as a result of the registered letters and his own personal telephone calls to delinquent members, they had all signified their intention of paying. He asked that the matter of suspension be laid over.

The advisability of giving up collations was discussed by Drs. Harryman, Hallett, Levitas,

Vroom and Littwin. It was the consensus of opinion that these should not be dispensed with.

Dr. Sarla reported \$1631.60 in the checking account and \$981 in the savings account, with all debts paid.

Dr. Wolowitz reported on the broadcasting over stations WBMS and WOR and also stated that the post-graduate committee would soon have the details of the course for May.

Dr. Kilts stated that a plan for collections was being formulated.

The applications of Drs. Joseph A. Rowe, of Ridgewood; Thomas F. Reid, of Cliffside; and Ivan A. Mader, of Hackensack, were read. The following were elected to membership: Drs. J. Willis Demarest, of Hackensack; Franz Kastler, of Rutherford; Trevalyn W. Omstead, of Westwood. The transfer of Dr. Calvin C. F. Bosch, of Iowa, was approved.

Dr. Snedecor explained the coming Councilor District Meeting which will be held at the Orizani Club, in Hackensack, on April 29, Hudson, Passaic and Sussex Counties joining us. The purpose of the meeting and the agenda as listed in the Bulletin were explained.

Dr. E. P. Essertier gave a very interesting account of the Child Welfare Conference recently held in Washington.

Dr. Frederick Bancroft, Director of Surgery at the Fifth Avenue Hospital, read a paper on "Thrombosis and Embolism". (To be published in the Journal later.)

## BURLINGTON COUNTY

Roscius I. Downs, M.D., Reporter

The regular meeting of the Burlington County Medical Society was held Wednesday afternoon, March 11, at St. Mary's Guild House, Burlington. There were 24 members and guests present, with President Joseph Kuder in the chair. The guests included Drs. George N. J. Sommer, President of the State Society; Irwin E. Diebert, of Camden, and Professor Bryan, of Rutgers University. The minutes of the previous meeting were read and approved.

Dr. P. H. Corpening, of Marlton, who was elected to membership at the last meeting, was present and signed the Constitution.

An application of Dr. J. George Wagner, of Delanco, for membership to the society, was read and referred to the Board of Censors.

The Board of Freeholders will not now pay the usual medical fee of \$5 for commitment of indigent applicants to the county asylum until it is proved that the applicants are destitute. This has been discussed in several meetings with little progress. Dr. Tracy was asked to write to the secretaries of the other societies for their methods of collecting these fees.

Professor Bryan, Drs. Sommer and Newcomb presented the program and the advantages for post-graduate lectures for Burlington County. If 15 men will subscribe a general course of lectures will be given at the hospital at Mt. Holly. There was immediate response from 14 members with the possibility of several more, so the above lectures are assured for Burlington County.

Dr. Newcomb reported that the societies composing the Fourth Councilor District, including Monmouth, Ocean, Burlington and Camden, will have a joint meeting in April. This probably

will be an evening meeting at the Pinetree Inn, Lakehurst.

Dr. Sommer spoke of the valuable help from the Woman's Auxiliary. In Burlington County Ilygeia was placed in the high school libraries by the auxiliary.

Dr. Hammell P. Shipp, Chairman of the Section on Surgery, announced the following scientific program: "Newer Anesthetics and Their Use in General Medicine", by Dr. Irwin E. Diebert, of Camden, and "Office Reduction of Fractures under Local Infiltration Anesthesia", by Dr. Hammell P. Shipp, of Delanco.

Dr. Diebert said the ideal anesthetic has not been found. Hypnotics are not free of danger. They must be placed in the blood stream to produce results. Ethylin gas is the safest of gas anesthetics. The patient must have a long period of induction as in ether. Its best use is in surgery of the extremities and the thyroid gland. Good relaxation and less bleeding are noted. Ethyl chloride is the most rapid acting anesthetic and more dangerous than chloroform. Somnoform is a similar product. Spinal anesthesia is fine for most cases but not for the nervous type.

Of the common anesthetics the technic of the rectal use of ether in oil is complicated. The toxicity of novocain, both used locally and intraspinally, is a definite picture. Convulsions or syncope results. It is terrifying but not dangerous. It is due to the paralysis of the vasomotor system and not from paralysis of the cardiac or respiratory center. This produces relaxation of the blood vessels. Blood, like water, seeks its own level. Keeping the head lower than the feet prevents the catastrophe.

Of the newer preparations percaïne or newpercaïne was mentioned. Sleep will last from 4 or 5 to 24 hours. These hours of relaxation are beneficial in cases of fracture of femur. Avertin, given rectally 15 minutes before an operation, produces a profound sleep. It is necessary to supplement this with other anesthetics. There is no vomiting and the patient needs less attention after operation. A chemically pure drug is not possible, however. Pernatin is similar to sodium amytal. It is made chemically pure and is given preliminary to ether. Intravenous solution of sodium amytal is not on the market. It is injected slowly like neoarsphenamin producing sleep in 3 minutes. Now sodium amytal is given by mouth before operation. It is given at 9 p. m. the night before and 6 a. m. before the operation. Before this 15 gr. of luminal were given in 2 doses of 7½ gr. each. This is beneficial in vomiting of pregnancy and alcoholism.

Dr. Shipp's method of local anesthesia in reduction of fractures is an infiltration above and in gap of fracture with the local anesthetic used. The technic is as follows: With careful aseptic and antiseptic preparation the skin, subcutaneous tissue, muscles (little in muscle) and blood-clot between the gap of fracture are infiltrated; 20-150 c.c. of ½% solution of cocain, procain or novocain are used. Wait 15 to 30 minutes and reduce the fracture. A marked relaxation is present which makes reduction simpler and painless. It is indicated especially in the aged and debilitated and for skull fractures. It is contraindicated in compound fractures and in the presence of infection. It is a safe procedure in the office.

Following an excellent meal, the meeting adjourned to reconvene in May.



**CAMDEN COUNTY**

Robert S. Gamon, M.D., Reporter

The regular monthly meeting of the Camden County Medical Society was held on March 3, 1931, President W. J. Barrett in the chair.

The chairman of Committee on Post-Graduate Instruction for this society reported that courses would start on Wednesday, April 1, and continue each successive Wednesday over a period of 8 weeks. Gloucester County will combine with Camden County in supporting these lectures. The application blanks are now in the hands of the members of the society.

The Committee of Resolutions presented its report on the recent death of Dr. John W. Donges, an honorary member of this society. (See obituary columns.)

The Scientific Program consisted of 2 excellent papers. Dr. R. K. Hollinshed, of Gloucester County, by invitation, rendered a paper on "A Review of Some of the Recent Literature on Angina Pectoris and Coronary Artery Disease". The paper was well received and was discussed by Drs. Shafer, Goldstein, Browning, Reik and Hollinshed. The second paper was given by Dr. S. Snedecor, of Bergen County, by invitation, on "Shall the Doctors Advertise?" The speaker's remarks were illustrated with lantern slides. The paper was discussed by Drs. Reik, Lippincott, Lee and Del Duca.

Among the guests from the other societies were: Dr. H. O. Reik, Editor of the State Journal; Dr. Tracy, Secretary of Burlington County Society; Drs. Diverty and Hollinshed, of Gloucester County.

The meeting was well attended.

**ESSEX COUNTY**

E. LeRoy Wood, M. D., Reporter

Dr. George J. Holmes, Director of the Department of Health Education of the Newark Public Schools, was the principal speaker at the meeting of the Essex County Medical Society, held Thursday evening, March 12, in the auditorium of the Academy of Medicine, taking for his subject "What is Medical Inspection of Public School Children Doing for the Child and for the Physician?" When Dr. Holmes took office in 1901 his main work was the detention of infectious and contagious diseases among the pupils. Now the work has developed to embrace instruction in preventive medicine and hygiene. At the present time emphasis is laid on disease prevention and on the prevention of bad results of physical defects. The school authorities do not propose to enter the practitioner's field of treatment although their work with mental defectives, cripples and undernourished children may verge on such field. He outlined the development of the Medical Department of the Public School System, with its many ramifications through assistant physicians, consultant specialists, dentists, nurses, nutritionists, gymnastic instructors, oral hygienists, child guidance specialists, and said that the objective is complete instruction in conservation and improvement of health. Dr. Holmes displayed charts showing the organization of his department.

Dr. George T. Palmer, D. P. H., Director of Division of Research, American Child Health As-

sociation, opened the discussion, saying: There are 3 clear-cut reasons for medical service in the schools. In the first place, the state, in compelling people to send their children to school, is in duty bound to furnish reasonable protection against the hazards of school life; for there are hazards in going to school. The possibility of contracting communicable disease is increased when large numbers of children are brought into close contact. In going to school the preschool child passes from the shelter of his mother's wings into a new world where he must begin to take care of himself, and schools should do their best to see that his health is not injured in the process. The schools need medical advice in planning protection against the spread of communicable diseases. This means the encouragement of immunization against smallpox and diphtheria, close daily observation of children to detect signs of disease in their incipency, and rules on the readmittance of children after illness.

In the second place, schools very properly should protect their investment. If some children can't hear the teacher, or see the blackboard, or are absent a great deal because of colds, and if some of these conditions can be improved by medical attention, then it is good business on the part of the schools to help direct children to places where corrections can be obtained. It is certainly proper for the schools to help parents make children receptive to an education; it saves the expense of repeated grades and is of definite service to the child and his family. For children more severely handicapped, medical advice is needed in selecting such children as are in need of special instruction methods. In short, the schools are justified in establishing some system of physical and mental appraisal of their pupils.

In the third place, education consists in part in assisting the child to develop and take care of himself. Care of health is a proper subject in the curriculum, as much so as arithmetic. One of the ways of teaching health preservation is through the medical examination. If painstakingly done and if the parent is present, the school physician has the opportunity to convince the parent and the child that there is something in the medical examination that will be useful in later life. If the examination is superficial the parent and child are quick to detect it. In the school examination the medical profession is on exhibit before the school child and his parent. It is within the school physician's power to either make converts to preventive medical service or to lessen popular faith in this service. I think that organized medicine has not sufficiently realized the extent to which the kind of a performance that the physician puts on in the school may affect medical practice later on.

These 3 uses of medical service are proper for the schools and are a matter of public interest transcending private interest.

What are the problems of medical service in the schools? The first is to find physicians who will do medical inspection for the salaries offered and who will take the job seriously. The next problem is administrative—how to deal with children in the mass. This differs from the work of the private practitioner who is dealing with individuals. What can 1 physician, on part-time, do for 2500 children? His first inclination is to look for short cuts, for some simple way of reducing this task to manageable proportions. This is a perplexing problem; how to reach the children

that need medical attention without himself slowly and laboriously examining the whole lot.

Another problem facing the school authorities is how to get the children, whom the school physician, after much effort, has discovered as needing further professional attention, to actually get this attention. This is a question that has to do with the parent, the private practitioner and the public clinics. In some cities, in order to meet the needs for corrective attention, schools have established their own corrective clinics. There may be good reasons for doing this in some localities. In principle, however, I would say that the schools should not go beyond the point of discovering and referring cases for outside professional attention. It would seem much better policy to depend on the private practitioners and the hospitals to provide such facilities. But, in so far as this service cannot be obtained either because of expense or other reasons, the schools are tempted to supply this demand. Naturally, the schools, after efforts to discover physical handicaps, are anxious to see that such handicaps as are correctable do receive proper attention. This is a problem that organized medicine ought to help the schools to solve.

*How has school medical inspection worked out in practice?* An enormous number of inspections and examinations have been made. Many physicians have given splendid service, with little or no recompense. But, generally speaking, for the country as a whole, the school medical inspection or examination program is inclined to be somewhat sketchy and superficial. Frankly, some of it is probably worthless, and might better not be done. Some states require annual medical inspection of every child. These laws might better be changed, for they, as much as anything else, are responsible for superficial work. If to comply with the law the physician has to inspect every child annually he is forced to work very fast superficially on each child. He can't do otherwise.

The schools want a high medical service that will be educational as well as effective, but they haven't been willing to pay the necessary price. It is difficult to get and hold sufficient competent physicians to enter and stay with this work long enough to solve some of the perplexing difficulties. There is no professional prestige for the physician in such a position unless the physician is under a health department or a medical institution and assigned to the school work as part of his job. It is hard to find men willing to devote their full time to this medical administration in the school. There is *very great* opportunity for improvement in this field.

*What has medical inspection done for the child?* In spite of its administrative short comings it has stirred great numbers of parents to seek medical advice for their children; people who probably would never have sought such attention otherwise. This advice has been sought from the private practitioner as well as from public clinics. A note from the school physician started me to the oculist with my child about 2 years ago. The net results of medical inspection in terms of improved national health are difficult to measure but that benefits have resulted is hardly disputable.

*What has medical inspection done for the practicing physician?* It has increased his practice, it has opened his eyes to the wide prevalence of physical handicaps existing even among pre-school children, and it has turned the more pro-

gressive men back to the medical school for post-graduate work. In the last few years one of the medical schools of the middle west has had many men register for post-graduate work in pediatrics and these physicians say that they want additional training because their patients are demanding a type of service that they are not prepared to give.

*How can school medical inspection be improved?* One way is for organized medicine to take a greater interest in the subject and lend serious aid in trying to solve some of the difficulties. Hospital staffs might assign a number for advisory service. One of the most hopeful signs is the recent meeting of the Medical Section of the White House Conference, in Washington. Here were assembled hundreds of physicians, many representing different specialties together with physiologists, anatomists, biometricians, deans of medical schools, dentists, nurses, hospital social workers, nutritionists, executives of voluntary health associations and of official health agencies, each meeting the other on equal terms, each recognizing that each group has something to contribute to the question of health service for children. It means a great deal when people recognize the limitations of their own special field and are willing to contribute their bit to the solution of problems that need social as well as medical correction. School medical inspection can be improved if schools and school medical officers will keep certain objectives clearly before them, definitely fix responsibility, and not overstep the bounds into fields better conducted by others.

It can be improved by repeal of compulsory annual inspection laws which would entail prohibitive costs if properly carried out and by schools getting away from the idea of quantitative service and substituting in its stead service of a better quality. Service should be extended only as funds are forthcoming to permit this extension at no sacrifice of quality.

The relations of the schools to the private practitioners can be improved if extensive programs involving the practitioners are adopted only after consulting the organization representing the practitioners concerned; instead of adopting programs and then expecting practitioners to fall into line. The application of medical service to schools can be improved if foundations will contribute funds for administrative research to help work out reliable methods and routines, and scientific ways of measuring results. The height-weight-age tables have had great vogue in the schools as a means of picking out under-nourished children. Recent research has shown us that underweight is largely due to skeletal variations such as narrow hips, narrow and shallow chest. Weight is determined very largely by skeletal build. The heavy child, as a rule, has a broad and deep skeletal framework; the lightweight child a slighter framework. Nutritional status is better measured in terms of grip and condition of subcutaneous tissue, and yet an enormous amount of attention has been showered on underweight. We need better methods of discriminating which children need this special attention.

It is frequently said that medical knowledge is 20 years ahead of the application of this knowledge. I am inclined to doubt this in the field of school health work. I have a feeling that practice is catching up, if it is not getting well ahead of knowledge; that some things are being done for which there is very inadequate justification.



Research is needed to bring scientific knowledge abreast of current practice.

I have tabulated the results of a survey of the use of medical and dental service for pre-school children in 146 cities of the country. The results came from inquiries at the individual homes of 140,000 children under 6 years of age. These surveys were carried out during the past 8 months under direction of the Medical Section of the White House Conference on Child Health and Protection. This inquiry covers 4 types of service—health examinations, dental examinations, vaccination and immunization. Six New Jersey cities are included. In the average city the proportion of children under 6 years of age who at some time in their lives have had a health examination—while well—is 48%. The percentage in Newark was 49, or just above the average. East Orange was 71%, Trenton 67%, Elizabeth 51%, Passaic 40% and Camden 32%. In Newark only 3% of preschool children have had a dental health examination; 19% have been vaccinated, and 23% immunized.

These figures for Camden were, 32% health examination, 3% dental examination, 13% vaccinated, 5% immunized. For Elizabeth, 51% health examination, 5% dental examination, 12% vaccinated, 23% immunized. For Trenton, 67% health examination, 7% dental examination, 27% vaccinated, 10% immunized. For East Orange, 71% health examination, 22% dental examination, 24% vaccinated, 36% immunized.

No city of our state was included in the groups of the 5 cities ranking highest among the 146 cities in each of 4 health measures.

*Dr. Henry C. Barkhorn*, President of the Essex County Medical Society, then introduced Miss Janet M. Geister, R. N., Director at Headquarters, American Nurses Association, who spoke on the subject "Nursing Mr. Middle-Man" and reviewed some of the present day economic problems of organized nursing. The high cost of sickness is attracting considerable attention and the middle class family with limited means finds difficulty paying a day and night nurse \$7 each, plus board, for any length of time. Miss Geister said that this per diem charge could not be reduced by the nurse because she only has work 8 months each year and is only paid for 7, and she must be always available. Miss Geister suggested as remedies part-time nursing in the home according to the needs of the patient, and staff nursing in the hospitals, giving the patient only the amount of actual special nursing he needs and charging him proportionately, saving him from paying for the nurse's idle periods.

*Drs. M. Weinstock Bergman*, *Giovanni Fasano*, and *Nicholas L. Pollis*, all of Newark, were elected members of the society.

## Eye, Ear, Nose and Throat Section

### Academy of Medicine of Northern New Jersey

*E. LeRoy Wood*, M.D., Secretary

*Dr. J. Wallace Hurff*, Chairman of the Eye, Ear, Nose and Throat Section of the Academy of Medicine, devoted the meeting held Monday evening, March 9, to reports of interesting cases.

*Dr. B. M. Hawley*, of New Brunswick, reported a case of "Mastoiditis with Complications". J. M., colored, aged 34, came to see me on September 23, 1930, suffering with suppurative otitis media on

the right side. His trouble began 3 weeks previously following a cold for which he had been treated by his family doctor. Severe pains had been with him for about 48 hours. Paracentesis was done at once, with immediate relief and a free flow of pus. I saw him 2 days later when the discharge was very profuse and he was feeling very well. A week later his family doctor phoned me that he had a chill, but otherwise was all right. I advised his removal to the hospital for an x-ray examination and observation. Instead of going to the hospital he called at my office saying that he was feeling well excepting for a severe headache. Examination showed no discharge in the canal; drum membrane was reddened and suggestive of pus or infection still there; absolutely no pain on pressure over the mastoid.

X-ray examination showed mastoiditis with most of the trouble in the attic. At operation on October 6 the mastoid was found badly infected; pus was plentiful from the attic to the tip; lateral sinus was uncovered showing an infective thrombosis. The sinus clot was removed and the wound packed with iodoform gauze. He was discharged from the hospital in a week, having run a perfectly normal temperature from the day of operation. He came to the office for his mastoid dressings and about October 28 complained of some headache, which became more severe the next day, and on the following morning at 2 a. m. I received a telephone call stating that the man was unconscious. I ordered his removal to the hospital and saw him about 7 a. m. when he was absolutely unconscious; pupils moderately dilated, and a slight stiffness of the neck. Spinal puncture was done; the fluid was cloudy. The old wound being re-opened and cleaned out, the sinus held a clot but no free pus was found until a probe was passed through the dura in the region of the sinus. This was opened wider and considerable pus escaped. A probe passed into this abscess cavity about 1½ in., so an iodoform gauze drain was inserted and the rest of the wound packed. The Wassermann had been negative, but he acknowledged a specific infection acquired 7 years before, and for which he had received treatment. In spite of negative Wassermann I felt that his previous syphilitic state had something to do with the present sickness, and gave him on the day of operation an injection of sulpharsphenamin. It looked very much as if the man was going to die and I did not think the injection would do any harm. The next day the patient was very much better, answering questions and understanding most everything that was said to him.

Pus obtained from brain abscess and cultures of the spinal fluid both showed the Friedlander bacillus.

The patient showed steady improvement complaining mostly of weakness in the legs, not being able to walk very far, and at the end of 4 weeks he was discharged from the hospital and 3 weeks later went back to work. The question that I would like to present to you is—"Do you think the sulpharsphenamin did any good or was it a useless effort?" Personally, I think it did good. Examination of records shows that infection of the meninges by the Friedlander bacillus is rare and that when such infection occurs it is generally fatal; there being only 2 or 3 authentic recoveries on record.

*Dr. Nathan Zvaifler*, of Newark, reported 3 cases

from the Beth Israel Ear, Nose, and Throat Service.

Case 1. M. S., first seen in the clinic with diagnosis of left optic atrophy, cause unknown. Examination was negative except for a deflected septum and hypertrophied middle turbinates; the left antrum was slightly cloudy but irrigations were negative. Radiogram of the sinuses revealed no further pathology. He was admitted to the hospital and a submucous resection and double turbinatectomy were done. The operation was performed with no special difficulty and nose was packed with vaselin gauze. Next day at 8 a. m., about half of packing was removed; temperature 100.2°; patient had no complaints. At 10 a. m. complained of headache, which became progressively worse, and by 3 p. m. he was very restless, slightly irrational, and picked the remaining packing from his nose. Temperature at this time was 102.6°. At 9 p. m. he was delirious; temperature 103°; stiff neck and suspicious Kernig. Lumbar puncture revealed a cloudy fluid under pressure; reported later to be pneumococcus type 4. Blood culture done at same time showed the same organism. Lumbar punctures were done twice daily; he also received some antipneumococcus serum. Condition became steadily worse and Dr. Barkhorn and I did a wide decompression for frontal head sepsis. The frontal sinus showed hyperplastic mucous membrane from which the pneumococcus was obtained on culture; there was no bony erosion nor any localization of the process revealed in our wide exposure.

Autopsy did not disclose clearly any route of infection from nose to brain and we thought most likely that the meningitis and abscess were secondary to a septicemia caused by osteothrombophlebitis of one of the smaller veins.

Case 2. J. T., 3 years old, was admitted to the hospital with diagnosis of meningitis. The history went back 3 weeks to a sore throat with temperature of 102° in the morning and in the evening normal. On December 27, about 10 days before admission, a swelling was noticed on back of left thigh. Both father and mother were syphilitic and the child had a + 2 Wassermann. Examination showed a swelling of the left thigh and a suspicious Kernig; no stiff neck; no abnormal reflexes; temperature 101.5°. Lumbar puncture showed fluid under marked pressure and about 30 c.c. were removed. Examination of the fluid at this time was entirely negative except for positive Wassermann and Kahn. Immediately after the lumbar puncture the child shot a temperature of 105° and on this date the pediatrician noticed a red ear drum on the right side. The child daily became worse and another lumbar puncture was done which showed markedly cloudy fluid with 380 white cells to the field, and on smear streptococcus hemolyticus; at that same time the ear was bulging. I saw the child and advised an immediate mastoid operation, which was done the same evening. Mastoid was completely necrotic and a wide exposure of the dura and sinus was made. The child did badly and died 2 days later.

Autopsy examination and review of the history led to the conclusion that the cerebral condition and the abscess of the thigh were secondary (the latter metastatic) to infection of the blood stream from otitis media at the time of the reported sore throat.

Case 3. Child, J. S., with history of having aspirated a pin 1 year before and been for past few

months treated by various physicians for a persistent cough. Finally, one day she coughed up what appeared to be part of a pin. X-rays showed rest of pin in the left lower bronchus. In New York she was bronchoscoped unsuccessfully and came back to Newark. That night she suddenly developed a severe pain in the chest with cyanosis and rapid respirations, and was brought to the hospital where diagnosis of traumatic pneumothorax was made. Radiogram revealed a completely collapsed lung with pin in the lower left bronchus and an infection of the pleural cavity. It seemed inadvisable, and was probably impossible, to reach the foreign body through a bronchoscope with the lung in that condition, and a thoractomy was done to relieve the empyema. The lung failed to expand and she had a persistent fistula from the operation with a thickening of the pleura and an encapsulated empyema. In January of this year, 3 months later, she suddenly coughed out the rest of the pin from the collapsed lung, in spite of the fact that it had been collapsed for 4 months or more. She was recently operated on again to break up the adhesions in the pleural cavity and to drain the remaining collection of pus.

Dr. James B. Shannon, of Montclair, reported a case of "Brain Abscess with Pneumococcal Meningitis and Recovery. May 9, 1930, P. P., male, aged 19, admitted to Mountinside Hospital on the service of Drs. Richardson and Moore, with a provisional diagnosis of bilateral chronic mastoiditis complicated by intracranial extension. History of discharge from both ears for 17 years; some transient pain in ears and headache since 1917. Three days prior to admission, developed intense pain over the right mastoid region, which became progressively more intense. Day before admission had a chill, followed by high temperature, mental depression, unbearable headache and vomiting.

On admission, temperature was 105°, pulse 100; W. B. C., 16,100; 82% polymorphonuclears. Spinal fluid cloudy and under increased pressure (no manometer reading made); 8400 cells per c.c. Positive pneumococcus smears; and cultures showed pneumococcus, type 4. Blood Wassermann 4+. Radiograph showed infantile sclerotic mastoids with no detail; far forward sinus.

Patient was very listless but could be aroused, moaning with pain. When strenuously aroused, cerebration was slow, but patient seemed transiently oriented. No motor aphasia. Pupils small, sluggish; right larger than left. No nystagmus. No paralysis. Hyperemia of left fundus. Blurring of right disc. Foul discharge from both ears, more profuse from right. Tenderness over both mastoids, more pronounced on right. Canal on right side boggy, obscuring view of drum. Left drum depressed; high attic erosion with cavitation, containing cholesteatomatous material. Hearing loud voice at auricle. Marked retraction of head, with rigidity of neck, which could not be overcome. Good coordination considering patient's lethargic state. No clonus, geniculars absent. Positive Oppenheim and Babinski.

A few hours after admission a right radical mastoidectomy was done; the sinus exposed and examined, appeared normal; middle fossa exposed and dura found covered with unhealthy granulation tissue. Incised and more than 2 oz. of thick, foul pus evacuated from a large encysted temperosphenoidal abscess cavity. Drainage with soft rubber dam; wound packed open



around drain. Culture from mastoid and abscess cavities showed pneumococcus.

The following 6 days presented a rather stormy period, patient having to be kept under restraint, irrational, garrulous, and taking off bandage. Spinal taps were carried out twice daily with difficulty. There was a progressive decrease in cell count in subsequent specimens of spinal fluid. The last positive pneumococcal culture was obtained 4 days after operation. Temperature ranged from 100° to 104.6°; pulse 60-100. On the seventh day postoperative the temperature and pulse returned to practically normal and remained so.

Six weeks after the initial operation a secondary flap and closure operation was done. The radical cavity being packed with iodoform gauze around the wick of rubber dam, draining the abscess cavity. Drain permanently removed 2 weeks later and patient discharged to out-patient department. Complete healing of radical cavity 10 days after discharge.

I do not consider this an unusual case, nor a permanent recovery. A recent review of some 50 brain abscess cases of otitic origin, with varying degrees of meningitis, reminds me our bubble of elation over apparent success is all too often ruptured at a subsequent autopsy.

In the case of this patient, I feel that the future is very uncertain; a potentially dangerous ear needing operation, for which he has not been willing to give consent; an established syphilitic infection; an encysted chronic temperosphenoidal abscess, which has not been obliterated and which may or may not be sterile; and some residual signs of encephalitis. At least no meddlesome surgery has been done to date. What the eventualities of the future may be, I am not prepared to say.

*Dr. Lyndon A. Peer*, of Newark, reported "Plastic Repair After Radical Frontal Sinus Operation and 2 Cases of Rhinoplasty". The first case which I am presenting tonight is that of a young girl who came to the City Hospital 1½ yr. ago with an acute left frontal sinusitis. The sinus was operated on externally and free drainage given into the nose and outside over the brow. Improved slowly for 2 weeks and then began to have fronto-occipital headache, chills and a high temperature. A second operation was performed in which a large portion of the frontal bone adjacent to the left frontal sinus, including the inner plate of the sinus and entire brow, had to be removed in order to reach healthy bone. The wound was left wide open, exposing the dura. The patient left the hospital 2 months later cured of her osteomyelitis, but there remained a wide scar in the forehead closely adherent to the dura and a deep depression over the left brow. As the young lady was very sensitive about her deformity I performed a plastic operation. The scar first had to be removed carefully from the external surface of the dura. I then rotated the deeper tissues so as to fill in the depression and approximate the skin edges. As you may see by comparing her present appearance with this photograph taken before operation, she has a very satisfactory result.

Case 2. This patient had a hump over the bony bridge of her nose which caused it to appear twisted to the right. The line of the dorsum of the nose exclusive of the hump was straight and all that the patient required was removal of the hump. This was accomplished through an alar

incision in the vestibule to prevent an external scar. In these cases it is best to remove the periosteum first before chiseling off the bone, and if a groove remains it is necessary to refracture the nasal processes and squeeze the bone together to fill in the groove.

Case 3. An examination of the original photograph taken before operation shows the bony bridge displaced to the left and a saddle in the region of the cartilagenous bridge. A submucous resection had been performed 15 years ago, but the cartilage support remaining was twisted to the left and prevented setting the bones in a mid-plane. It was first necessary to remove part of this obstructive cartilage bar. The bones were then fractured and set in correct position and the saddle filled with strips of lower lateral cartilage taken from the alar regions and transferred to fill out the depression.

*Dr. Henry C. Barkhorn*, of Newark, reported 3 cases of "Head Sepsis". He discussed the pathways of infection in intracranial sepsis, describing a case of pia-arachnoid abscess from the frontal sinus, a temperosphenoidal brain abscess from the ear, and a meningitis from the petrous tip and labyrinth, to illustrate anterior, middle and posterior fossal types.

*Dr. Dennis F. O'Connor* read the report of the Nominating Committee, which was composed of Drs. Elbert S. Sherman, Chairman, Dennis F. O'Connor and Henry C. Barkhorn, naming for the new officers: Chairman, Dr. C. W. Buvinger; Secretary, E. LeRoy Wood.

There were 40 present, and the meeting adjourned at 10.45 p. m.

# Academy of Medicine of Northern New Jersey

E. LeRoy Wood, M.D., Reporter

The Annual Meeting—and Twentieth Anniversary—of the Academy was held at 91 Lincoln Park, Newark, Thursday evening, March 19.

The Nominating Committee recommended for consideration the following list of officers: President, Wells P. Eagleton; First Vice-President, F. DuBois Bunting; Second Vice-President, Walter B. Mount; Secretary, Adrian R. Kristeller; Treasurer, Henry C. Barkhorn; Trustee, John F. Haggerty; Library Committee, Frank W. Pinneo; Corresponding Secretary, Harvey Herald; Committee on Admission, B. E. Failing.

*Dr. H. J. F. Wallhauser*, Chairman of the Nominating Committee, paid tribute to Dr. Newman, who has served as Secretary of the Academy more than 15 years. He suggested the position of Secretary Emeritus be created for Dr. Newman and this was done.

Speakers at the meeting were Ferdinand Pecora, former assistant district attorney of New York County, and Prosecutor Joseph L. Smith, of Essex County. Mr. Smith declared an undesirable tendency on the part of the public to criticize public officials has sprung up recently.

Mr. Smith paid tribute to Dr. Harrison S. Martland, chief Essex County Medical Examiner, as "the greatest member of his profession in the county and one of the greatest aids we have in the prosecution of many criminal cases".

Mr. Pecora, speaking on "Social Responsibility for Crime", declared the legal profession, as leaders in the handling of crime, could learn a lesson from medical practice in this work. He pointed

out that physicians have come to realize the value of preventive medicine and have developed health codes and practice to prevent epidemics, in addition to the usual curative procedure and quarantine measures after disease appears.

"The legal profession has done too much legislating, given too much attention to penal laws, spent too much time dealing with the criminal, the diseased person. It has not given enough attention to the social agencies that can eradicate crime, that can eradicate conditions which breed crime germs and convert otherwise healthy boys and girls into criminals.

It is better to prevent the making of criminals than to deal with them afterward."

The former New York prosecutor pointed out that criminals every year are appearing in younger groups. He declared the solution to crime must be found in training of the young either by their parents or otherwise. "Stricter laws", he said, "have deterred professional criminals from continuance of crimes of violence, but have not stopped the making of young gangsters."

Mr. Pecora attacked the growing complication of law, declaring legislatures "have been tinkering with the penal law continually for more than a century".

"In the penal code of New York", he said: "There are dozens of sections devoted to the crime of larceny. The student of law must read hundreds and hundreds of pages of judicial opinions also in order to understand the law on larceny. The same is true in regard to homicide or perjury or any other felony.

And yet each of these 3 could be summed up in one of those older laws, so much simpler, so much plainer. Larceny law is no more than a development of 'Thou shalt not steal'. The others, too—homicide—'Thou shalt not kill', perjury—'Thou shalt not bear false witness.' How much simpler this is, how much wiser."

#### The Academy of Medicine of Northern New Jersey

Ralph Kristeller, D.D.S., Assistant Secretary

At the twentieth anniversary meeting, Dr. Erwin Reissman entertained the Honorable Ferdinand Pecora who was the essayist of the evening.

Honorable Ferdinand Pecora presented a new outlook to many of us, especially as to the close relationship between our relative professions. He stated that the legal profession would do well to follow our example of finding the cause for the disease rather than the cure for the one already afflicted. In summarizing his lecture he went back to the Ten Commandments, saying that much legal phraseology and interpretation could be condensed to "Thou shalt not kill", "Thou shalt not steal", and "Thou shalt not bear false witness". If these were taught more diligently in the home, all children of tender years would understand their meaning.

Prosecutor Smith was called from the audience to deliver a short address.

Prior to the former assistant district attorney's talk, the Chairman of the Nominating Committee, Dr. J. H. F. Wallhauser, read his report. For President, Wells P. Eagleton; Vice-President, P. DuBois Eunting; Corresponding Secretary, Harvey Herald; Secretary, Adrian Ralph Kristeller, D. D. S.; Treasurer, Henry C. Barkhorn; all the above nominated for the term of 2 years.

Trustees for 5 years, E. Reissman, J. F. Hagerty; Committee on admission for 3 years, B. E. Failing; Library Committee for 3 years, H. R. Livingood.

Following this he paid a most glowing tribute to the efforts of Dr. E. D. Newman, who for the past 18 years has held the post of Recording Secretary, and by resolution favored creating the post of Secretary Emeritus, which was passed unanimously. He then nominated Dr. E. D. Newman for the position which report was greeted with tremendous applause.

The past year has been one of very great progress in the annals of the Academy of Medicine. Dr. Reissman has achieved the distinction of having large audiences at the stated meetings. He has had as his guests essayists from far and near, even going so far as Montreal in quest of them.

During the present régime, many beneficial changes have been made in the building of the Academy. Two plaques have been erected in appreciation of gifts previously given, one to the Dean of the Newark Medical Profession, Dr. E. J. Ill, and the other in memory of Dr. William Disbrow.

#### GLOUCESTER COUNTY

Henry B. Diverty, M.D., Reporter

An especially interesting session of the Gloucester County Medical Society was enjoyed at the Country Club, Thursday evening, March 19.

Dr. Thomas C. Stellwagen, professor at the Jefferson Medical College, took for his subject "Some Phases of Genito-Urinary Surgery of Interest to the General Practitioner". Dr. George J. Mullershon, a former resident of this community, also spoke.

Lectures concerning the post-graduate courses in cardiac diseases and gastro-enterology to be conducted by the Medical Society of New Jersey, in coöperation with the Rutgers University of New Brunswick, were discussed at great length. The course will start Wednesday, April 1, at the Camden Dispensary, 729 Federal Street. The Educational Committee from Camden and Gloucester Counties includes Drs. A. H. Lippincott, Benjamin F. Buzby, Paul Mecray, Thomas K. Lewis, of Camden; R. K. Hollinshed, Westville; H. B. Diverty, Woodbury; and S. F. Ashcraft, of Mullica Hill.

Those attending the meeting were: Drs. I. W. Knight, W. J. Burkett, J. Harris Underwood, O. R. Wood, James Hunter, Jr., A. B. Black, Duncan Campbell, Ralph Hollinshed, E. E. Downs, Harry Nelson, Paul Pegau, H. W. Stout, C. I. Ulmer, and H. B. Diverty.

Guests included Drs. Corson, of Bridgetown; Reik, of Atlantic City, Editor of the State Medical Journal; Casselman, of Camden, and Church, of Salem.

#### HUDSON COUNTY

E. G. Waters, M.D., Reporter

The monthly meeting of the Hudson County Medical Society was held at the Carteret Club, Jersey City, March 3.

The paper of the evening was by Dr. Wells P. Eagleton, of Newark, who spoke on "Complica-



tions of Cranial Injuries". The first part of the paper was accompanied by a lantern slide demonstration in comparative anatomy of the central nervous system, with especial reference to progression of the higher centers and retrogression of the olfactory areas in the ascending scale of development. The presentation was enhanced by Dr. Eagleton's charming personal observations of developmental changes of special importance, and of many of the physiologic experiments marking mile-stones in our understanding of what are now accepted as facts.

Dr. Eagleton then discussed fractures of the frontal and temporal regions of the head, contrasted with regard to their resistance to infection, and the effects of direct trauma. Fractures of the frontal region are of importance because of the anatomic configuration which permits the rapidly growing mucous membrane of the nose and air sinuses to invade a rent in the dura before the latter has had a chance to grow. Thus, when the dura has been broken, or the blood sinuses involved in a frontal fracture, there is an excellent chance for either immediate or late infection. The patient may apparently recover, yet die months later when he contracts a head cold, the infective organisms of which invade the brain via the mucous membranal tract laid down long before. When the dura is not broken, there is seldom danger from this source. Fractures in the temporal region present quite another problem. Here, the dura, less intimately adherent to the bone, is less frequently torn by a fracture. Also there is no rapidly growing epithelial surface to invade the fracture line, as the area is well covered by the temporal muscle and fascia. But here we have something else of importance. The middle meningeal artery courses this region and is usually involved in linear fractures. When it is torn, it is unable to retract as most arteries do, for it is firmly held by the dura, and bleeding continues. Dr. Eagleton stressed repeatedly the so well known but so easily forgotten "free interval" symptom of this type of fracture, where the patient gets up after the injury, and subsequently becomes unconscious as the accumulating subdural blood causes increasing intracranial pressure with progressive embarrassment of the vital centers. This type of fracture requires immediate operation to save the patient's life. Its treatment is quite in contrast with other types of fracture, where the fracture is unimportant, the cerebral trauma being the important and unfortunately irremediable factor.

Dr. Eagleton talked on fractures involving the auditory apparatus, emphasizing the necessity of not interfering or washing out the ear, lest a bad condition be made worse by inducing infection.

Slides depicting various types of skull fractures with their all-important attendant brain injury were shown. After all, a fracture is nothing, unless brain injury accompanies it. And when the brain is injured, no man may say how or when the patient will recover, for permanent changes all too frequently follow.

Dr. Eagleton discussed at some length the medicolegal difficulties encountered in defining the effect of brain trauma, which effects are often profound without having any serious objective findings. When he concluded, many questions were asked and a lively discussion brought out many points of practical interest and stressed many of those which had been mentioned in the presentation.

## Clinical Society of North Hudson Hospital

J. Africano, M.D., Reporter

The regular monthly meeting of the Clinical Society was held Tuesday, March 10, with Dr. Pellegrino D'Acierno acting as chairman; 52 members and guests were present. Dr. Tannert read the hospital report for February: 195 admissions; 244 discharges, 17 deaths, of which 5 were medical, 5 surgical, 1 new-born, 1 E. E. N. & T., and 5 pediatric; 4 autopsies were performed.

Drs. Klaus and Pearlstein discussed plans for the Annual Staff Dinner to be held on Wednesday, March 25, at 9 p. m., at the Paramount Grill, New York City.

Dr. Klaus discussed the death of a patient with final diagnosis of ileocecal intussusception and edema of the lungs. A male child, aged 5½, complained on the first day of abdominal pains, vomited on the second day, and had more severe colicky pains on the third, when he was admitted to the hospital, February 22. There was tenderness in the R. L. Q., with some rigidity and slight distension; temp. 102°; W. B. C. 13,000; polys, 80%. The picture was that of acute appendicitis. Dr. Losche suggested intussusception when he did a rectal examination and believed he felt a mass, but there were no gastro-intestinal symptoms except the vomiting—no diarrhea or bloody stool. At operation an intussusception of the ileocecal type was found, the ileum entering with the valve into the cecum for a distance of 8 in.; the bowel itself was not gangrenous; however, the appendix was kinked and bound down by adhesions, and intensely inflamed. It was removed because so severely diseased, and the intussusception reduced. The child developed a distended abdomen and expired on the fourth day postoperatively, from paralytic ileus. Dr. Klaus felt that this child should have gotten well, and emphasized certain points regarding the surgical aspects of intussusception, gleaned from experience and not often referred to in text-books: the surgical treatment usually consists of reduction of the intussusception, thus restoring the continuity of the bowel; if the intestine is gangrenous, a resection is indicated, but these are bad subjects for such a procedure; an intussusception is one of the most disastrous catastrophes in a child, analogous to perforated gastric ulcer or to acute pancreatitis in an adult; the appendix is practically in all cases found to be congested, edematous, and 2-3 times the normal size—actually it is part of the same condition, i. e., secondary to the intussusception, and therefore *it should not be removed*, as the ligature is apt to blow off from relief of the edema; regarding the question of recurrence in the same patient, after recovery, there are no cases on record; immediately after reduction the parts are so edematous and swollen that they could not possibly telescope into each other again; in the case of adults sometimes an intussusception forms from a polypoid tumor of the intestine—a recurrence here would be in the form of intestinal obstruction from angulation or adhesions.

Dr. Luippold stated that this case impressed him with the difficulty of diagnosis of the acute abdomen in the child; the patient gave a fairly typical history and signs of appendicitis, and yet at operation 2 conditions were found present, either of which presumably might have been primary.

Dr. Tannert brought up the question of mobile

cecum, sometimes found in these cases; it is claimed by one author that in the ileocolic type, unless the ligaments are shortened at operation, there may be a recurrence of the intussusception.

*Dr. Schulman* asked concerning an enterostomy—not done in this case because there was only slight distension pre-operatively.

*Dr. W. Braunstein* gave the pathologic findings in the appendix: peri-appendicitis confined to the serosa, without involvement of the mucosa and lumen; regarding recurrence, he stated that theoretically it might happen; often an intussusception is found postmortem, but without signs of congestion.

*Dr. William Braunstein* reported a case of "Spontaneous Pneumothorax". M.H., male, aged 26, onset of present illness 5 weeks before admission, when the patient noticed that he was becoming short of breath, particularly after slight exertion. At the same time he began to complain of a cough which he attributed to an ordinary cold. He also became conscious of a rapid heart beat after slight exertion or excitement. These symptoms continued without any marked progression. In addition, he complained of hoarseness for several weeks before admission, and the cough had become productive of yellowish material, but there was no hemoptysis. The family history was negative to tuberculosis. His parents, 6 brothers and 3 sisters, were living and well.

The past history showed the usual children's diseases, measles and mumps. Venereal diseases denied. Surgical history negative. Weight was 128 lb. as compared to 135 lb. 1 year ago.

The essential findings were in the chest; heart was not displaced but the sounds were very rapid; no murmurs; right upper chest anteriorly and posteriorly gave a slightly tympanic percussion note; left upper was dull; right axillary space dull; tactile and vocal fremitus increased over the right upper but breath sounds slightly diminished and respiration gave a definite metallic sound; the left upper and middle right, anteriorly and posteriorly, presented patches of bronchial breathing and numerous persistent râles. At times there was amphoric breathing in the right upper chest. The abdomen and extremities were not remarkable except for clubbing of the fingers.

Roentgenogram of the chest revealed a pneumothorax of the upper right anterior lobe; interlobular band radiographed; infiltration of the middle right lobe; fibrosis of the upper left lobe with cavitation; heart and mediastinum normal.

Sputum positive for tubercle bacilli on 2 occasions. Blood count: Hb., 78%; R. B. C., 4,540,000; W. B. C., 10,500; P. 76; L. 24. Urine and Wassermann negative.

The patient had an up and down temperature varying between 99° and 100° a. m. and 102° and 104° p. m. Pulse varied between 100 and 140. Respirations 25 to 40. Blood pressure 102/68. Shortly after the diagnosis was made, arrangements were made for transfer to Laurel Hill.

*Dr. Braunstein* explained the x-ray findings, the signs of pneumothorax being quite evident; there was no effusion.

*Dr. Pearlstein* said that dyspnea had been present for a long time, and that the ultimate prognosis was grave from the standpoint of chronic pulmonary tuberculosis; he cited an article in a

recent issue of the Jour. A. M. A., in which a similar case is discussed.

*Dr. Justin* pointed out that while the pneumothorax was on the right side, the lung involvement was on the left, hence it appeared that the perforation was of long standing, an attempt perhaps of nature to rest the lung on the same principle we resort to in creating an artificial pneumothorax. The physical signs were not typical of pneumothorax, but could have been due to a large-sized cavity.

*Dr. Luippold* discussed the etiology: The commonest cause is tuberculosis of the lung, from rupture of a cavity or a caseous focus in acute phthisis; he considered *Dr. Justin's* hypothesis of nature's attempt to rest the lung quite plausible, but it occurs also in an active tuberculous process, and most times by an accidental perforation of the pleura.

*Dr. S. Africano* suggested changing the title of diagnosis to read "Chronic Pulmonary Tuberculosis Complicated by Pneumothorax" to differentiate the spontaneous type.

*Dr. S. Braunstein*. "Ulcerative Colitis". F. D., male, aged 41, usual occupation bar-tender, at present iron worker, was admitted to ward on January 20, 1931, with the chief complaints of swelling of right leg and ankle, dyspnea, and pain across the back. For the past week he has noticed bright red blood in his stool. Had a marked pallor of the face and mucous membranes. Heart markedly enlarged in all of its diameters; soft blowing systolic murmur with maximum intensity over the apex, transmitted upward to the axilla; also a rough systolic over the aortic area transmitted to the right nipple. The rhythm is regular and the sounds of fair quality. The liver palpable midway between the umbilicus and the right costal margin; not tender nor nodular. Spleen also enlarged and easily palpated. No ascites; no palpable masses. Rectal examination showed several soft internal hemorrhoids.

Roentgenogram of chest showed the heart enlarged in all diameters. Gastric series was reported as "ulcerative colitis of the descending colon".

The striking features of this case are the marked anemia, profuse rectal bleeding, enlarged liver with a smooth edge, markedly enlarged spleen, enlarged cardia with murmurs, and x-ray findings of colitis. We feel that we can account for the clinical manifestations of this patient on the basis of cirrhosis. The marked anemia is of secondary type and is due to bleeding from the hemorrhoids. We do not feel that there is any ulceration of the bowel in the nature of a non-specific ulcerative colitis because all the symptoms of colitis are missing. There may, however, be a solitary ulceration on the basis of venous engorgement, of the same etiologic factor as the hemorrhoidal bleeding, which is secondary to portal obstruction.

Treatment in this case was a bland diet and rest in bed. He also received 2 transfusions which brought his hemoglobin up for a few days but due to his profuse rectal bleeding, it was at one time as low as 19%, with a relative decrease in red cells. He has had dilute HCl and calcium lactate and his blood picture has improved, the Hb. on March 10 being 41%, but prognosis is poor.

*Dr. Green* had considered a diagnosis of throm-



bocytopenia, but this was ruled out when the platelet count was persistently a low normal.

*Dr. Justin* first saw this puzzling case on his service in January, when he had 20% hemoglobin, an enlarged heart and a bloated appearance pointing to an acute Bright's disease; the history, however, pointed to cirrhosis, and the findings up to this time place him as a case of hypertrophic cirrhosis more definitely.

*Dr. Stein* believed that a cardiac origin of a chronic passive congestion of the liver should be considered the probable diagnosis till proved otherwise.

*Dr. S. Braunstein*, in closing, stated that Hanot's type of biliary hypertrophic cirrhosis was ruled out on the basis of no fever jaundice, early ascites, and the negative history of biliary or other infectious diseases, and that the absence of gastric or intestinal symptoms did not rule out cirrhosis.

#### ATYPICAL PNEUMONIA—2 CASES

*Dr. Tidwell* reported 2 "Cases of Atypical Pneumonia". A. P., an infant 7 months of age, admitted to the hospital in what appeared to be a moribund condition. Feeding was from the breast, and recently cooked cereals had been added to the diet. Orange juice or cod-liver oil had not been given. Had been perfectly well until 4 days before admission, when a dry cough was noticed; this became persistently worse and 2 days later was accompanied by fever and cyanosis. The urinary output was diminished at this time. On the fourth day of illness the child became much worse; dyspnea and cyanosis were marked and he had been in coma for several hours before being brought to the hospital.

On percussion, the chest revealed dullness in the right base posteriorly, where crepitant râles were heard, accompanied by bronchial breathing. Mucous râles were heard throughout the chest, amounting almost to a pulmonary edema. The heart sounds were normal but rapid. Temperature 101.4°; pulse 144; respirations 20 and of the Cheyne-Stokes' variety.

Inhalation of oxygen was instituted and 1/300 gr. of atropin sulphate given for 3 doses. Lumbar puncture was performed and 35 c.c. clear fluid obtained under marked pressure. Two hours later the child seemed to react and cried considerably. Next morning the character of breathing was much improved. Temp. 102.8°; P. 160; R. 60. He seemed to be aware of his surroundings and followed objects. As the fontanelle was still bulging, another spinal puncture was done and 18 c.c. of fluid removed under 14 mm. Hg. pressure. The chest findings remained about the same, with the exception of possibly fewer crepitant râles. Lumbar puncture was done on the next 2 days, the first under 20 mm. pressure and the last at 10 mm. From this time on there was no more bulging of the fontanelle. The spinal fluid was negative, as was the Wassermann.

The x-ray report on admission was negative. The day before discharge, both upper lobes reported as hazy.

On February 13, 10 days after admission, temperature rose to 104° and next day the left ear drum was found to be bulging. Double paracentesis was performed and followed by a profuse discharge of pus from the left ear. Within 3 days temperature reached normal and remained so until he was discharged as cured on February 20.

*Case 2.* K. K., a male infant, 16 months of age, admitted to the hospital February 6, 1931, with fever, cough and irritability.

He had no convulsions nor muscular twitching, but a discrete macular rash was noted on the chest.

In the chest there were scattered mucous râles with some dullness in the right base; a blowing systolic murmur heard at apex of the heart. Temperature, 104°; pulse, 168; resp. 64.

This picture continued not much changed for 6 days, when the temperature dropped suddenly from 104.6° to 99° and the child seemed improved. However, the next day it was noticed that there was some neck rigidity, Brudzinsky positive but negative Kernig. Temperature again rose to 104°. Lumbar puncture was done but no fluid obtained. This was repeated the next day with similar results. A tap on the following day yielded a few drops of clear fluid, which was negative on culture. Twelve days after admission the child started to vomit; the character was not projectile, but continued once or twice a day. Two weeks after admission there was still dullness, crepitant râles and bronchial breathing in the right base. X-ray of the chest showed nothing significant. The Mantoux test was negative. At this stage he appeared quite drowsy, and it was felt that we were dealing with an encephalitis.

On February 22, the left patellar reflex was absent. The next day a tap was again attempted and 5 c.c. of slightly viscid, yellowish fluid was removed under decreased pressure. Examination of this fluid was unsatisfactory. February 25 a cisternal puncture was performed and 12 c.c. of cloudy fluid removed under pressure. The cell count was 10,200; no organisms were seen in the smear. After a few hours, culture showed definite meningococci. Antimeningococcic serum (15 c.c.) was given by the cisternal route. The general condition became much worse, and in spite of stimulation the child expired. Autopsy was refused.

Final diagnosis was bronchopneumonia complicated by meningococcic meningitis with sub-arachnoid block.

*Dr. Stein* stated that these cases were interesting from the standpoint of cerebral manifestations; the first suffered from a temporary meningismus and coma, and was relieved by spinal tap; in the second case there appeared to be an independent infection of the cerebrospinal system, with blockage, so that repeated attempts at relief of spinal pressure failed in both cases; the pulmonary signs were marked enough but the radiographs did not bear them out.

*Dr. Bailyn* saw the second patient on the outside, and described the events leading up to his order of hospitalization—beginning with slight fever, cough and few chest signs on the first day, he found the child in coma on the second day with lungs so full of râles that the heart sounds were inaudible, and a trismus of the oral cavity prevented a throat examination; later in the day cyanosis supervened and the cerebral symptoms became more manifest; a spinal tap was attempted at the home before removal to the hospital.

*Dr. J. M. Stein.* "Chronic Vaginitis with Acute Pyelitis in Infant." V. L., aged 11, admitted February 12, with the complaints of dysuria, chills and fever, headache, anorexia and offensive vaginal discharge. For the past 3 years has had an offensive vaginal discharge; treated by various

physicians, using permanganate douches with temporary relief.

Three days before admission, patient complained of pain in the right side of the abdomen and nausea. The following day she vomited and complained of dysuria. Following a douche she had a considerable flow of blood from the vagina; the following morning similar hemorrhage.

The only significant finding was a positive Murphy sign on the right side. Temp. 105°.

Laboratory findings—Blood count: Hb. 70%; R. B. C., 3,900,000; W. B. C., 8800; P. 67; L. 33. Urine: Many large clumps of W. B. C.

Patient had an irregular fever with peaks at 104-105° and with remissions and occasional intermissions. The longest period of normal temperature was from March 3 to 7, but next day the temperature rose to 106°. On March 10 temperature dropped to normal again.

On March 3, 1931, Dr. Hekimian made a cystoscopic examination; the bladder and ureteral orifices were normal; catheterized urine of the right kidney contained a few white cells; it was sterile on culture. Report of pyelogram; right pelvis normal in shape; calyces distorted and pressed to the midline; right ureter dilated; no evidence of stone; right kidney not outlined.

On March 6 the urine contained a large amount of albumin (16%) and many R. B. C. Examination of vaginal ulcer scraping showed an acid-fast bacillus; could not be determined whether it was smegma or tubercle. A guinea-pig was inoculated for accurate determination. The Wassermann and von Pirquet tests were negative.

Treatment for the vaginitis was daily swabbing with 10% argyrol. Response was good. At this time there is no discharge. The ulcers have healed. Treatment for the pyelitis was not so satisfactory. She was on a restricted diet and potassium citrate. On March 6 she showed evidence of a pyelonephritis.

The interesting features of this case are: The chronic vaginitis which probably was the cause of an ascending infection and subsequent pyelonephritis. Severity of the disease is rather unusual. Anorexia was a marked feature during the entire course.

Dr. Hekimian did the cystoscopy and saw large flakes of pus welling around in the bladder cavity; culture proved to be sterile; he suggested methylene blue for treatment.

Dr. Tidwell concluded that not enough alkali had been given the patient, from a comparison of the urinary findings with the temperature curve; it was found that 15 gr. every 4 hr. caused only a partial drop in temperature, while on complete omission of alkali the fever rose to 106°; when readministered the fever remitted to normal; the vaginitis is cured, while the nephritis still persists, and on the latter the prognosis of the cases hinges.

Dr. Kolb saw this patient in private practice before admission to the hospital, and considered possible ulcerative tuberculous vaginitis, or some yeast infection; the von Pirquet was negative.

Dr. Pearlstein mentioned as another possibility the presence of an infection due to an organism similar to the spirochete of trench-mouth disease, which thrives in an alkaline medium.

Dr. Luitpold suggested a means of differentiation between the smegma and the tubercle bacillus by prolonged immersion in acid-alcohol; in case of the smegma bacillus the carbol-fuchsin

would eventually fade away, while the acid-fast organism would hold the stain indefinitely.

Dr. Kooperman has found that a low leukocyte count does not mitigate against a diagnosis of pyelitis; the reaction of the urine *per se* does not determine the absence or presence of infection, but if the urine is alkaline the patient is more prone to infection.

Dr. Hekimian reported an "Interesting Case of Hematuria". The presence of blood in the urine, either microscopic or macroscopic, may be due to lesion of the genito-urinary tract, systemic condition, or pathology of organs in close anatomic relation to the tract. Among the systemic causes are blood diseases, such as leukemia, hemophilia, polycythemia, Hodgkin's disease, purpura, analine dye poisoning. High protein diet and physical exertion may give rise to temporary hematuria.

Acute lesions of the appendix, female adnexa or colon can be responsible for traces of blood in the urine. Although the method of transmission of infection from adjacent organs to the urinary tract by continuity is a possibility, the usual channel is by the lymphatics. Blood in a specimen of urine in a case of suspected acute appendicitis needs investigation to rule out a coexisting pathology. Hematuria as precarious menstruation and from tumors of the adrenals has been reported.

Of all hematurias, 75% are due to lesions of the genito-urinary tract, and 70% of these are found in the upper urinary tract. Establishment of diagnosis of conditions involving the bladder and urethra is comparatively easy, because these parts are brought under direct vision by the aid of the cystoscope and urethroscope. However, the same is not true in case of the kidneys and ureters, because the method is an indirect one; it depends upon the visualization of an opaque medium in the tract. Variations in outline of normal renal pelvis, irregularity of the outline due to blood clots and exudates may easily lead to erroneous diagnosis. Consequently, repeated complete urologic examinations may be necessary to arrive at a correct conclusion.

The following case is of interest from a diagnostic standpoint: W. C., male, aged 41, truck driver, admitted with the complaints of weakness, generalized pains, epigastric pain, bloody stools, hematuria, urgency, dysuria and frequency of 4 months' duration. Past history: Gonorrhea at 17 and 34; gonorrheal arthritis with the last infection. Operated upon for repeated hemorrhages from gastric ulcer, 7 yr. ago.

The patient was kept under observation for a week. Laboratory findings: Blood count: Hb., 65%; R. B. C., 4,000,000; W. B. C., 6000; P., 60. Wassermann negative. Urine, daily specimens: alkaline, bright red or smoky with blood; sugar negative; albumin from trace up to 14% by volume; phosphates; and R. B. C. Of course blood will give an albumin reaction, but on later dates albumin was still reported when there was no blood. X-ray was negative for calculi.

First attempt at cystoscopy was unsuccessful on account of the marked irritability of the urethra. He came under my care a week later. There was no visible discharge; external genitalia negative; first urine blood-tinged; prostate and seminal vesicles congested and extremely tender; moderate amount of debris after massage. A small observation cystoscope was introduced into the bladder after passing several stric-



tures of the anterior urethra. Bladder mucous membrane normal; no growth; no blood observed from the ureters; posterior urethra deeply congested and bleeding.

The urinary symptoms continued, and 3 days later ureteral catheterization was done under spinal anesthesia. A jet of blood was seen from the left ureter. Pyelography on that side showed no abnormality; catheterized specimens were found sterile on culture.

He was transferred to the Urologic Service with the medical diagnoses of grippe, chronic gastric ulcer, chronic cholecystitis and chronic glomerular nephritis. Urinary symptoms were relieved with medication of methylene blue and prostatic massage. To date there has been no recurrence of hematuria or urinary distress.

The source of hematuria in this case was from 2 different areas. Observation showed some of the specimens contained blood only at the start of the stream, the rest of the flow being clear. The origin of this was at the posterior urethra, as confirmed by cystoscopic examination, resulting from chronic prostatitis and vesiculitis and further aggravated by strictures of the anterior urethra. Most of the specimens with smoky hue were of renal origin, most likely due to glomerular circulatory disturbance. The possibility of fibrous or angiomatous change in one of the renal papilla must be kept in mind.

Dr. Tataryan related a case of "Hyperemesis Gravidarum". The essential cause of hyperemesis gravidarum is toxemia, although in certain cases neurosis and reflex excitability are strongly in evidence. No satisfactory distinction can be made between toxic and neurotic vomiting as the neurotic states more frequently result from than cause hyperemesis. A disturbance of the carbohydrate metabolism is a common feature. The toxins originate from the fetus or from endocrine dysfunction or focal infection in the mother. There is profound necrosis of the central portion of the lobules in the liver; and in fatal cases, the liver undergoes fatty degeneration.

N. B., female, aged 28, gravida iii, para i, admitted to hospital on August 3, 1930; state of gestation 2 months. She had pleurisy in 1928; pernicious vomiting through her first pregnancy, giving birth to a living child; vomiting in second pregnancy, which ended in spontaneous miscarriage in the third month of gestation. One month before admission she started to vomit; at first only in the mornings, then after each meal, and finally 20-30 times a day. Tenderness all over the abdomen, more marked near the umbilicus. Blood pressure 175/70. Urinalysis negative except for acetone and diacetic acid. Blood count: Hb., 80%; W. B. C., 6300; P., 50; L., 49; M., 1. Blood chemistry: NPN, 54 mgm.; creatinin, 1.9; sugar, 60; urea, 20; carbon dioxide, 60.

The usual treatment was instituted but no improvement was noticed for the first 5 days, so on the sixth day cystoscopy was done, which revealed moderate congestion of the trigone, some trabeculation, apparently normal ureteral orifices. The right ureter was easily catheterized; the urine cloudy and microscopically revealed W. B. C. free and in clumps, some R. B. C., and staphylococcus on culture. After catheterization she showed marked improvement; did not vomit for 6 days and was discharged as cured. Follow-up: After her discharge, she was very comfortable except occasional emesis through the pregnancy until full term.

*Comment.* In hyperemesis gravidarum, if the patient does not respond favorably to the routine treatments within a week, cystoscopic examination should be done to determine the possibility of a symptomless pyelitis, regardless of the urinary findings. It should be done early in order to prevent an active pyelitis, as this complication will make the prognosis much graver. In patients suffering from hyperemesis in repeated pregnancies, *ad interim*, the condition of the kidney pelvis and ureters should be carefully investigated.

Dr. Kolb referred to Duncan's work on this form of toxemia. He regards all cases as potentially pernicious and uses emenin, an endocrine product which he claims acts as a specific, and concludes that some condition of the mother prevents the formation of an antitoxin to circulate in the maternal blood to overcome the normally formed toxins of pregnancy, so that the vomiting is progressive; whereas the emenin supplies this deficit.

Dr. D'Acerno emphasized that all cases of vomiting of pregnancy are not amenable to treatment in the same manner, and advised that, besides the taking of a careful history and doing a detailed physical examination, stress should be placed on the following 5 points:

(1) The neurotic element: many cases will respond solely to rest in bed; isolation, good nursing, and a mild sedative like luminal gr. 2 by hypodermic injection 2-3 times a day, or simply by chloral 10 gr. daily by rectum.

(2) The reflex element: for practical purposes this should not be disregarded, as in some cases the vomiting is actually terminated by replacing a retroverted uterus, or by the cure of a rectocele by pessary.

(3) The endocrine factor: Hirst, of Philadelphia, still advocates corpus luteum as the drug choice; others recommend thyroid extract, or pituitary and parathyroid in more intractable cases.

(4) Coincident focal infections: not only teeth and tonsils but also a latent sinus infection, or a pyelitis, cystitis or ptychoccephitis, may be the original toxic focus; Pollak of the Austrian school designates 98% of the vomiting of pregnancy patients to this class.

(5) The most important, the factor of metabolism, and conveniently divided into 3 stages:

(a) The dehydration stage: as a result of vomiting, water is lost to the maternal organism, and this may be made up by the injection of glucose solution, Titus using up to 3 liters, or 3000 c.c. of a 3% solution, daily, either subcutaneously under the breasts or by intravenous infusion; if gotten early, this may tide the patient over in 1 or 2 weeks.

(b) The starvation stage: if severe vomiting still persists for over 2-3 weeks, there results destruction of serum proteins; this destruction may be counteracted by the intramuscular injection of phosphoplasmin-lecithin solution; 75%, in Dr. D'Acerno's experience, react favorably and permanently to this treatment. He suggested transfusion in this stage, though he has not tried it.

(c) The stage of hepatic degeneration, as shown by bilirubin in the urine, a positive immediate direct Van den Berg, and the other increasing signs of toxemia which may finally end in coma; no case should be allowed to reach this stage; Van Wyck is using lately a continuous phlebotomy.

sis adjusted at about 600 c.c. per hour of a 3% solution, for 5 hours daily; also a high caloric diet is being advised in the form of duodenal feeding, as 3 oz. each of skimmed milk and 10% glucose; finally, when no improvement occurs in this stage after 4-5 days under intensive treatment, the uterus must be emptied.

### MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Medical Society met in the Carteret Club on the evening of March 11, President Swern presiding.

Dr. I. W. Held, of New York, delivered an address on "Modern Conception of Jaundice and its Clinical Treatment", giving a detailed account of numerous laboratory analyses attending artificial production of the several constituents found in the blood stream during a period of jaundice. The various methods employed in differential diagnosis of jaundice were specifically defined, and the determined manner in which Dr. Held expressed himself proclaimed his thorough acquaintance with this subject.

Dr. H. D. Bellis was elected an annual delegate in the place of Dr. M. W. Reddan, who, by virtue of his office, is a member of the House of Delegates.

Dr. Harry J. Majeski was elected to associate membership in the society.

### MIDDLESEX COUNTY

Samuel Gordon Berkow, M.D., Reporter

The regular meeting of the Middlesex County Medical Society was held March 25, 9 p. m., at the Perth Amboy City Hospital, Dr. William H. McCormick presiding.

Drs. George N. J. Sommer and Henry O. Reik were welcomed by the president, who expressed the pleasure of the society in the visit of these distinguished guests.

Drs. Irwin, of Matawan; Alexander Fishkoff, of Perth Amboy, and Dieker, of South River, were voted to membership. The application of Dr. Rothfuss, of Woodbridge, was referred to the Membership Committee.

Dr. M. S. Goldberger, of Mount Sinai Hospital, New York City, read a paper on the "Ascheim-Zondek Test for Pregnancy". Of 368 tests, correct results were obtained in 95%. This is slightly less than Ascheim and Zondek's figures, which show 98.6% correct results, but is a higher percentage of efficiency than is claimed for the Wassermann test in the diagnosis of syphilis.

Dr. Goldberger cited 2 cases of chorio-epithelioma in males, in which female sex hormone was obtained from the blood.

Dr. Morrell, Director of Endocrine Research at Squibb's Laboratories, New Brunswick, opened the discussion. He inquired as to the efficiency of a pure pituitary preparation in producing a positive skin reaction on injection intradermally, and as to the nature of the cases in which the Ascheim-Zondek would be of clinical value.

Dr. Sommer spoke on urine tests for pregnancy as carried out on his surgical service. He stated his high regard for the methods elaborated by Frank and his co-workers.

employed by the County Society in acting upon applications for membership and stressed the necessity of abiding by the by-laws which have been adopted by the State Society. He then called attention to the value of an active Woman's Auxiliary to the county society, which can be intermediary between the society and the public; it can influence legislators; it promotes better understanding between physicians.

Dr. Reik spoke entertainingly and informatively on various subjects important to the members of the society. He spoke of the *Journal* and its many features, including original articles, scientific data, and reports of scientific meetings; and its pages devoted to medical economics, esthetics and forensic medicine; he urged the members to read the *Journal* for information vital to their welfare. He scored the endorsement of cigarettes and cigars by physicians and health officers.

Rising vote of thanks was tendered to Drs. Sommer, Reik, Goldberger and Morrell.

### Medical Section of Rutgers Club

#### February Meeting

John H. Rowland, M.D., Secretary

Regular meeting of the Medical Section of the Rutgers Club was held on Thursday evening, February 26, at the Campus Tea Room. Dr. Klein presiding, with 32 members, friends and guests present.

There being no business to transact, the speaker of the evening was immediately introduced. Dr. Walter Dannreuther, Director of the Department of Gynecology at the Post-Graduate Hospital, New York, spoke on "Diagnosis and Treatment of Local Infection of the Uterus and Adnexa", presenting his topic interestingly with aid of lantern slides. He stressed particularly the modes of infection, demonstrating the lymph channels and other paths of infection, and differential diagnosis, and also the difference between good surgical judgment and bad practice. The paper was discussed freely by members.

After the meeting the members adjourned to the porch dining room where they were entertained by Drs. Klein, King, Leonard and Merrill.

#### March 6 Meeting

The regular monthly meeting was held Friday evening, March 6, at the Campus Tea Room, where about 35 members, friends and guests were present; Dr. William Klein presiding.

Dr. John Morehead, of the Post-Graduate Hospital, New York, spoke on the subject of "Traumatic Injuries", cautioning against mistakes in injuries particularly of the head, back, pelvis and knee joints, where external appearance or superficial examination would not suggest any serious trouble.

Dr. Morehead spoke of wounds with particular relation to disinfection, suturing, drainage, dressings, and tetanus antitoxin; also of wounds that that were already infected, and stressed treatment in early, intermediate and late stages of infection, with indications for treatment. He also referred to injuries to the joint, particularly synovitis and dislocations, stressing early recognition, prompt reduction, retention and early motion, and return to function.

The paper was discussed by many of the members, to the advantage of all.



After the meeting the members adjourned to the porch dining room, where they were entertained by Drs. McGovern, McKiernan, Nieman, and Nafey.

### March 12 Meeting

The annual meeting of the Medical Section of the Rutgers Club was held on Friday evening, March 20, at the office of Dr. Howley, Dr. William Klein presiding. There were 15 members present. The minutes of the previous meeting were read and approved.

Reports of Committees: Dr. Faulkingham, in the absence of Dr. Merrill, Chairman of the Auditing Committee, reported on the auditing of the books of the Treasurer up to February 6, 1931.

Committee on Visiting Nurses: In the absence of Dr. McGovern, Chairman, Dr. Johnson reported that the committee met with Miss McLeod, of the Visiting Nurses' Association, and discussed the efficiency of nursing and coöperation of physicians. It was moved by Dr. Johnson, and passed, that the Secretary be instructed to write a letter to the Visiting Nurses' Association commending the good work they are carrying on.

Application for membership to the Club from Dr. Tilton was read. Resignation of Dr. King was accepted.

At this point Dr. Nafey brought up the question of closed meetings for members only. Reference was made to Article III of the Constitution which covers that point.

Applications for membership of Drs. Rona, Chester T. Brown and Marshall Smith were voted upon. Drs. Brown and Smith were voted in as members of the Club.

There being no other new business, the members proceeded to the election of officers for the ensuing year. Dr. Howley, Chairman of the Nominating Committee, read the nominations of Dr. Johnson for Chairman, Dr. Gutmann, Vice-Chairman, and Dr. Rowland, Secretary and Treasurer. A motion was made and passed that the nominations be closed, and that the Secretary cast a ballot for the election of the above-named officers.

Next, a report was made by the Treasurer up to March 20, 1931.

At this point Dr. Klein thanked the various members of Committees and others who aided in making this past year so successful.

Dr. Nafey made a motion that a vote of thanks be given Dr. Klein for his excellent services during the past year and for the refreshments about to be served. On motion the meeting adjourned.

### MONMOUTH COUNTY

William H. Von Oehsen, M.D., Reporter

The February meeting of the Monmouth County Medical Society was held at the Berkeley-Carteret Hotel, Asbury Park, Wednesday evening, February 25, with Dr. William K. Campbell presiding. Communications were read and ordered filed.

A letter was read from Dr. Henry O. Reik, Executive Secretary of the State Society, asking for information as to historic data our society may possess which would be of use to the Historian. On a motion from Dr. G. V. Warner, of Red Bank, seconded by Dr. H. Brown, of Freehold, the Secretary is ordered to let Dr. Reik know that the minutes of this society are available since the date of its organization in 1816 and are now in possession of Dr. Warner, who

is writing a history of the medical profession in Monmouth County.

Dr. Warner also moved that the minute book dating from 1885 to the present time be bound. Motion seconded by Dr. Brown and carried. Dr. Brown was appointed by the President to take charge of the binding.

Application of Drs. Woronoff, Matthews and Niemtzow, for membership, were referred to the Board of Censors.

Dr. Frank Altschul, reporting for the Radio Committee, said a list of subjects was to be made from which those members who have not already broadcast will have an opportunity of selecting a subject and arranging for a date. It was also moved and seconded that a record be made of the talks which have already been given and incorporated in the minutes. Dr. Altschul was also asked to try to find out the reaction of the public to these talks and whether there have been any letters or questions sent in which would help us arrange a program.

The Committee on Education reported that those men who were interviewed regarding the Post-Graduate Course were mostly opposed to enrolling.

Dr. Fisher, of the Program Committee for the coming State Society Convention, gave a brief résumé of the meeting held in Trenton to arrange the different features of the program.

Mr. William Couse, President of the Asbury Park Trust Company, gave a very interesting talk on the "business and economic side of the practice of medicine", which brought forth some lively discussion.

Dr. James Fisher read a paper discussing the same subject from the doctor's point of view. This was also very well received.

A buffet lunch was served.

### MORRIS COUNTY

Marcus A. Curry, M.D., Reporter

A regular quarterly meeting of the Morris County Medical Society was held the evening of Thursday, March 12, at the Elks' Club in Dover. President Sutphen presided over an attendance of about 45 members and guests.

Routine business was suspended to give opportunity to insurance representatives to present their propositions. Mr. Heard, of Hornblower & Heard, Newark, explained concisely a policy to cover the physician against all claims for malpractice, except criminal acts, at a low rate; and recommending it for consideration by any physician not already covered or not adequately covered; and expressing a willingness to have a representative call at the physician's office to explain the contract further. The society was addressed also by a representative of other companies affording protection against other than malpractice: the Manufacturers' Casualty Insurance Company of Philadelphia, writing automobile insurance, liability, property damage, collision and fire, at special low rates; also explaining a life policy, a special contract to members of the medical profession; the Commonwealth Casualty Company, a Pennsylvania concern, with a contract specially written up in conference with Dr. Pinneo, of Essex County.

Minutes were read and approved, including the proceedings of the Executive Committee, the

latter indicating that Drs. Costello and Plume will report on the death of Dr. Adsit. Favorable mention was made of the first annual meeting of the First Council District, at the Academy of Medicine in Newark, February 12.

Drs. Campbell and Horn were reported as dropped for non-payment of dues, in accordance with the by-laws.

Treasurer Emory reported a balance of \$1202.28, and that 5 members have not as yet paid their dues for 1931.

Dr. Ruth Ferris, of Morristown, was duly proposed for membership, the proposal taking the usual course.

To prepare a roster of officers for the ensuing year, to be submitted at the June quarterly meeting and voted on at the annual meeting in September, the following Nominating Committee was duly appointed: Drs. Young, Frost and Costello.

The scientific chapter of the meeting was a symposium on "Asthma" by Dr. Lathrope and his confrères, who read the following papers: "Some Difficulties of the Asthma Problem", Dr. George H. Lathrope; "Allergic and Bacterial Phases", Dr. Royce Paddock; "The Role of Focal Infection in Asthma", Dr. Lyndon A. Peer.

The papers (promised for Journal publication) indicated careful and painstaking preparation and elicited an unusual degree of interest, and contributed to making this meeting live up to the high standard that has been set in past years for the Dover meeting. The papers were widely discussed by Drs. Costello, Krauss, Spencer, Haven, Plume, Matthews, F. Grendon Reed, Pinckney, Julia Mutchler, and Howard S. Hatch, Resident Physician of the Morris County Tuberculosis Hospital and Tuberculosis Specialist at the New Jersey State Hospital at Greystone Park.

After adjournment refreshments were enjoyed in the club dining rooms.

### PASSAIC COUNTY

Wayne W. Hall, M.D., Secretary

The regular meeting of the Passaic County Medical Society was held at the Passaic City Club, Passaic, March 12, with Dr. Carlisle presiding. There were about 100 members present. The minutes of the February meeting were approved as read.

The Board of Censors presented its report to the society. This report contained the approval of the applications of the following doctors: Albert S. Irving, Radburn; M. G. Joelson, 122 Paterson Street, Paterson; and James M. Allen, 657 Main Avenue, Passaic.

A discussion was held as to the question of admission to the society of physicians doing contract practice. At present this matter is determined by the local society, although the subject is now in the hands of a committee of the state society.

Our society was greatly honored by the presence of Dr. George Sommer, of Trenton, President of our State Medical Society; Dr. John F. Hagerty, of Newark, Vice-President of the State Society; and Dr. Reik, of Atlantic City, Editor of the Journal.

Dr. Reik gave a report on the progress of the State Medical Journal, and called attention to some of its special features. The Executive Office has available medical movies and a projector which are offered for the benefit of society programs.

Dr. J. B. Morrison, of Newark, Recording Sec-

retary of the State Society, read a paper on "The Menace of State Medicine". He advocates preparedness on the part of the medical profession.

The scientific paper of the evening was presented by Dr. Royal C. Van Etten, Attending Gynecologist to the Sloane Hospital, New York City. His subject was "Modern Obstetric Methods at Sloane Hospital", illustrated by slides and movies.

Adjournment followed a collation.

## Obituaries

COLHOUN, Charles, of 24 West Passaic Avenue, Rutherford, died at his home February 23, 1931, at the age of 67.

Dr. Colhoun was born in North Carolina, acquired his medical education at the College of Physicians and Surgeons, Columbia University, and practiced in Rutherford for 30 years. For 16 years he served as a member of the Rutherford Board of Health.

DONGES, John W., of 805 Cooper Street, Camden, born of Jacob and Sarah Donges, September 18, 1844, in Strochsburg, Pennsylvania, died February 4, 1931.

Dr. Donges attended Strochsburg Academy and was graduated in medicine from the University of Pennsylvania in the Class of 1866. He was a member of the Camden City Council, U. S. Pension Board, Camden Board of Assessors and Camden Board of Health. He belonged to the Odd Fellows, Masons and was an Honorary member of the Camden County Medical Society.

### RESOLUTIONS ON THE DEATH OF DR. DONGES ADOPTED BY CAMDEN COUNTY MEDICAL SOCIETY

WHEREAS, John W. Donges, a medical practitioner for many years, and a valued member of the Camden County Medical Society, has left his earthly labors and passed on, therefore,

BE IT RESOLVED, that in his death the society has lost not only a faithful and skilled member of the profession, but also a distinguished representative in the community at large; one who has added dignity to the profession by earnest work as a plain citizen, in both peace and war times. Dr. Donges' entire life, as a man, was spent in the service of his fellow-men, and spent unselfishly. He was at the front, and in the line of fire, when the destinies of our National Government were at stake, and when peace returned he served his home community in various positions in the local government. His example will be cherished by his fellow practitioners who have adopted this resolution, and ordered that a copy be sent to his family.

Alexander MacAllister.  
A. Haines Lippincott.  
W. H. Pratt.

### ERROR IN OFFICIAL LIST

(Letter from Dr. J. B. Morrison.)

To the Editor: Will you kindly insert in the April issue of the Journal the following note:

Through an error in the office of the Treasurer of the Cumberland County Medical Society, the name of Dr. H. Garrett Miller was omitted from the list sent in for publication in the "Official List" of members of the Medical Society of New Jersey. Dr. Miller is and has always been in good standing.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication®

Vol. XXVIII., No. 5

ORANGE, N. J., MAY, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## PREVENTING THE TRANSMISSION OF SYPHILIS BY CONTROL OF IN- FECTIOUSNESS\*

JOHN H. STOKES, M.D.,  
Philadelphia, Pa.

The United States Public Health Service has recently released, as reasonably trustworthy, an estimate of nearly 500,000 new infections with syphilis annually in the United States; and irrespective of its cost in disability, syphilis has varied in different estimates, between first and fourth place among the causes of death in man, since Osler's revision of British mortality statistics. Syphilis is now definitely known to lead tuberculosis and scarlet fever in incidence; it is reported one-third more frequently than diphtheria, 3 times as frequently as small-pox, 5 times as frequently as typhoid fever; 600,000 patients with it are constantly under medical care in this country, an estimate which takes no account at all of the enormous number of latent infections for the moment neither under observation nor treatment. What more important subject could a medical society choose for consideration, in the face of these facts, than this—in very truth the critical health problem of the present day. The prevention of syphilis is not only important in itself, but it is important because the past 2 decades of medical history with respect to it have been a sovereign illustration of fundamental maxims in the control of disease in general as a

public health problem. At one and the same moment (and the fact is one of deep concern to us as individual medical practitioners), the syphilis problem is significant because it furnishes the ideal illustration of the value of controlling infectiousness chemotherapeutically by germ-destroying drugs, and also is the outstanding example of the greater effectiveness of state as compared with individual effort in the suppression of disease. Through socialized effort, directed at the control of infectiousness, the incidence of new infections with syphilis has apparently decreased since 1919, 5/6 in Great Britain, 2/3 in Germany, and 9/10 in Belgium. From France, whose individualism of medical practice compares with our own, and whose incidence of syphilis is, at least for the time being, on the increase, comes evidence as to the reasons for the contrast. An individualistic system for the control of an infectious disease lacks a coördinating force, a program control through central authority which follows through a plan of attack without regard to temperamental vagary, individual notions based on negligible experience, therapeutic impressionism, prejudices, self-interest and the activities of the pharmaceutical detail man. France and, to some extent, this country suffer from ailments with respect to the treatment of syphilis which Jeanselme and Brunier have clearly enumerated; a disposition to substitute bismuth for the arsphenamins; non-recognition of the infectiousness of syphilis in the woman; abandonment by both private physician and patient of all treatment as soon as signs disappear; the tendency of the practitioner to try new fads in both diagnosis and treatment;

\* (Read at the Passaic County Medical Society meeting, Dec. 10, 1930.)

and, among special influences of a social and economic character, an increase in prostitution and an influx of foreign labor. This country, in which, in contrast with the larger part of the Old World, 2/3 to 4/5 of all syphilis is in the hands of the practitioner, may well consider the maxim—"whom the shoe fits, let him wear it". Of the various ways of developing coöperation of the state and other social agencies in aid of the practitioner, without eliminating him from this field, I have written elsewhere, and have there recorded my belief that such a combination of interests, with preservation of the inestimable advantages of individualism in medicine, can be brought about. I should not, therefore, impose on your good nature and time in mere repetition, but should rather proceed to point out as clearly as I can how you and I, and all others who deal with syphilis, can assist in achieving the alpha and omega of its public health control, and ultimate extinction—the prevention of its transmission from person to person. Once given ideal accomplishment of this aim, as Parran has pointed out, and the disease should, in theory at least, disappear within the life of a single generation. Even though no such ideal consummation be reached at once, your effort and my effort toward this end will assuredly bring nearer that Utopian day.

I propose first to present to you certain biologic facts about syphilis, which condition our control of it as an infection. I do this without apology, because I know you agree with me that insight into first principles is the first essential to inspired attack on a problem. I shall next consider the control of transmission through the older, and always hopeful if not often helpful, method of the patient's co-operation; then its control by treatment, which is the distinctive and immeasurably more significant contribution of modern knowledge to the problem; and to certain special aspects of the general thesis, including the technic of controlling infectiousness in early syphilis; in syphilis involving the problem of marriage; in pregnancy; in industrial, social hygiene and public health fields; and finally,

that the problem may come home to you directly among physicians, nurses and dentists.

*Fundamental biologic considerations; the life cycle of the Spirocheta pallida.* There is a certain amount of clinical evidence that the spiral form of the organism of syphilis, with which we are all familiar, is not the only form taken by the virus of syphilis; and now that experimental study is beginning to lend tangibility to the matter one can be pardoned for introducing this phase of the subject with a somewhat speculative turn. Paternal transmission of syphilis, difficult to imagine if the organism be conceived as riding a spermatozoon to its destination in the ovum, to produce an infected child from an uninfected mother, could easily be explained if there were a rest form of ultramicroscopic or granular type. It is well established that the semen of the syphilitic male is infectious though spirochetes have rarely been seen in it. So, too, is the macerated and ground tissue of the lymph-node of the rabbit though no spirochetes can be found with the darkfield examination. Here, then, is the possibility of an unseen enemy in the problem of control of the disease by prevention of infectiousness. Levaditi and his co-workers, and of late Warthin, have lent an unexpected seriousness to the much ridiculed attempts of MacDonough and others to describe a life cycle for the organism of syphilis. While we need not expect a "Leukocytozoon syphilidis", we must be prepared to find that syphilis may achieve an unexpected and perhaps therapeutically inaccessible latency through the discovery of a rest form which is not recognizable by clinical laboratory methods, and hence difficult to test for, and perhaps to destroy by spirillicidal agents. Such considerations may seriously affect many of the generalizations about to be set forth in regard to syphilis in marriage especially.

*Viability of the Spirocheta pallida.* The organism of syphilis is an anaërobe, requiring, furthermore, the presence of tissue for cultural growth, and of moisture and protein solutions for survival. These facts make clear important rules governing the infectious transmission of the disease. The organism does not survive on dry surfaces, whether of



the body or elsewhere. Hence, closed lesions, such as the macular and papular secondary syphilid on the free skin, exposed to air and dry, are not infectious, though just beneath the epidermis the organisms are abundant. The doorknob, the dry clothing, the room occupied by such patients, the dust, are entirely harmless. On the other hand, let the epidermis be rubbed or macerated from the surface of a macular or papular lesion, and in the presence of exudate and the relative absence of air, a dangerously infectious lesion results. These conditions are met in the orifices and folds of the body, and in discharges or secretions emanating from them. Hence the extreme danger attaching to contact with the mouth and throat, the anal and genital regions, the axillary, inguinal and submammary folds of the patient with early syphilis. Dressings moist with such secretions, since they protect the organism from air in the presence of a protein medium, and instruments, including those of physician, dentist, and nurse, which are used in such sites, are dangerous. Contacts with such regions (and note that these are, like kissing and sexual intercourse, the intimate and emotionally controlled rather than the reasoned contacts of life) are the prime sources of transmission of the disease. While these facts are being emphasized, let it be noted that the older conception of an abrasion of the receiving surface as essential to infection, which has given rise to much false sense of security, is an error abundantly disproved by experimental evidence in even a relatively resistant animal like the rabbit. Opinion now leans as far in the other direction, in the suggestion of Kolle, that there is a definite type of human carrier, who, like the mouse, has acquired his infection without abrasion or reaction, and who redistributes it perhaps without open or obvious lesions. It is possible to acquire syphilis without an abrasion, and without a chancre, and to become a focus of distribution without being aware that one has the disease. This is the rôle apparently played by an unknown proportion of those patients, discovered by routine application of the serologic tests to general medical examination and diagnosis, who truthfully deny infection and have never realized

until late symptoms appeared that they had the disease.

The action of disinfectants upon the organism is significant. While the *Spirocheta pallida* is easily destroyed by weak disinfectants, it is only too frequently protected by the protein tissue constituents of solutions by which it is carried or surrounded. Failure to thoroughly wash before applying prophylaxis may, therefore, be fatal to effectiveness. There is a tragic absurdity in the spectacle of of an assistant putting tincture of iodine on a deep needle puncture obtained in operation on an active syphilitic, or of a nurse rubbing in calomel after a similar accident in drawing infectious Wassermann blood. The needle prick is the chief source of direct blood stream inoculation without chancre, unless nowadays negligent blood transfusions may outrank it. There is an additional disconcerting thought connected with chemical prophylaxis. In the recent International Congress at Copenhagen, Zurhelle showed that application of prophylactic ointments may simply act to prolong the incubation period rather than to prevent infection of the individual with syphilis. It is a matter for serious question, whether prophylaxis apparently successful, because no lesion appears, may not have simply cloaked rather than actually prevented infection. In practical work then, soap, water, and boiling, stand first, as with other disinfection, and false security from questionable precaution is more often a pitfall than anything else. As I shall say over and over, a sense of security and a low index of suspicion are the chief sources of infection with syphilis.

*Localization factors.* The association of syphilis with genital contacts is not purely fortuitous. The recent observations of Raiziss, to the effect that *Spirocheta pallida*, if introduced into the cerebral ventricle of the rabbit, does not give rise to a neurosyphilis as such, but results after a time in the appearance of a testicular chancre, suggest that the genital structures are real centers of elective localization for the organism. Similarly, from our own recent study of relapse phenomena, it appears that recurrent infectious lesions have a pronounced tendency to localize on the genitalia, 68% appearing there or in the

mouth, and 75% of the genital recurrent lesions being on the penis and vulva, ideally situated for spread of the disease. The testicle, too, is notable among the elective sites for localization of the organism. The tendency to perivascular localization, so important to the future of the victim of syphilis, is the result of the fact that blood carries the organism especially during the early weeks of the disease, but also during its course in later years. Fruhwald showed a decade and a half ago that the blood of a seronegative prostitute could be infectious; and the recurrence of spirochetal showers in the blood stream is the best available explanation of the fact that a syphilitic woman may give birth to a syphilitic infant between 2 pregnancies resulting in healthy offspring. Control of the hematogenous distribution of the organism within the body is then an item in preventing prenatal transmission of the disease to children.

Perhaps the most important of all the biologic influences affecting the transmission of syphilis, and one of the least appreciated, is *time*. The acutely infectious period of syphilis covers the first 5 years of the disease. In fact, infectious recurrences are largely over by the end of the second year, 93% appearing within this period. On the other hand, time can never guarantee the non-infectiousness of a person with syphilis, for there are authentic reports of infectious mucosal lesions appearing as late as 24 years after onset of the disease. It is true, none the less, that sparring for time is important in preventing the spread of syphilis, whether in permission to marry or otherwise. Every month and every year that can be allowed to elapse between the onset of a syphilitic infection and a possible transmitting contact, decreases the risk of infection. The chancre, the moist lesions of the secondary period, and the relapses on the mucocutaneous surfaces and the genitalia, are the chief sources of dissemination of the disease.

*The relapse factor.* We all recognize readily enough, perhaps, the primary infectiousness of syphilis during chancre and secondary periods. Most patients can be made to appreciate the danger they are to the community

in these stages. But *relapse* as a source of the disease has never been fully appreciated by the practitioner though the syphilologist has harped upon it since the days of Ricord. Infectious relapse is relatively unobtrusive, painless, and very easily overlooked. It occurs in sites invisible to the patient, and rarely examined by the physician. While numerically 1/5 as important as the chancre in transmission of the disease, the recurrent lesion is almost equally important as a source of infection because of the considerations just mentioned. Here, again, a false sense of security, engendered by a little treatment, and a low index of suspicion, spread syphilis.

*The serologic factor.* The response of the Wassermann and precipitation tests to treatment for syphilis has led us to one exceedingly dangerous and unwarranted generalization—that cure and non-infectiousness progress hand in hand. The facts regarding the use of the Wassermann tests as a guide to infectiousness are these: Infectious lesions may appear immediately following the obtaining of a negative blood test on patients as late, in my own experience, as 6 years after infection. They may appear while the blood Wassermann reaction is negative, and the *Spirocheta pallida* may even be demonstrated from them by darkfield, as in a case I presented to an army class during the war. I have known a physician to authorize intercourse between a Wassermann negative husband and an uninfected wife, without the use of a condom, and 3 months later the wife was brought to me with early secondaries. The syphilitic chancre is never so infective, and it literally swarms with *Spirocheta pallida*, as at the precise period in the disease when the actively and acutely syphilitic patient is Wassermann negative. The sharpening of the sensitivity of serologic tests has not helped the situation because, although as high as 96.5% of clinically recognized relapses give positive Wassermans, these positive tests are obtained in the presence of the full blown lesion, after the damage is in all probability done, and not as anticipatory warning that the patient is about to become infectious. There is, therefore, only one course for the physician to pursue in practice. *Dismiss the Wassermann or any*



*other serologic test from the mind as evidence of the infectiousness or non-infectiousness of a patient with syphilis.* It has literally nothing to do with the question, and only ultimate disaster can follow any attempt to use it as proof of the presence or absence of the infectious state.

*The syphilitic carrier.* All sorts of interesting problems surround the syphilitic carrier, and I have already alluded to them in quoting Kolle's views on the prophylaxis problem in relation to the production of asymptomatic carriers. An extremely serious phase of the carrier problem concerns the production of chronic infectious relapsers by insufficient modern treatment. Morton Smith some years ago called attention to the disappearance of early lesions of the conventional primary and secondary types under the régime of a few doses of arsphenamin. He might well have stressed their replacement by the arsphenamin recidivist, the product of an era of inadequate treatment. In the old days, the patient, under pills, relapsed and relapsed until the cumulative immunity reaction plus the slow effect of the drug brought the process to a symptomless latency. Conditions were as bad as they could be with respect to transmission. The immeasurably greater potential benefits of the new era, however, have not been realized, because not only does the amount of arsenical generally used by the practitioner in a given case fall far short of what is needed for cure, but his interference with, and defeating of the immunity reaction by insufficient treatment converts the patient the more easily into a chronic recidivist. This generalization applies especially to the group of seronegative primary cases in which treatment is begun in the chancre stage before secondaries appear, for it is now definitely apparent that development of full-fledged secondary lesions tends to protect the patient from subsequent relapse. The patient whose early symptoms have been abolished by a few doses of neo-arsphenamin, enters on an indeterminate period of danger to his community, represented by the general statement that approximately 10 to 13 times as many patients relapse after 8 injections of an arsphenamin,

as after 28 injections. I shall apply this observation again, later, to the principles of treatment for the prevention of early relapse. Meanwhile, let us not forget the infectious relapse.

*Control of infectiousness through coöperation of the patient.* In the days of mercury and iodide as the sole agents for the treatment of syphilis, the disease, as I have said, ran its course through a series of infectious relapses in which the control of transmission was largely in the hands of chance and the patient. The results of this state of affairs are before you in the wide spread prevalence of syphilis today. No system of control which depends on chance and the patient can hope to accomplish much. Real self-denial on the part of the patient with syphilis is rarely to be obtained, not because he is syphilitic but because he is human. He is the victim of a disease which is prolonged, insidious and inconspicuous in its most dangerously transmissible phases. His coöperation must be implicit, blind, irksome, and protracted. Yet, in the face of such considerations, plus some knowledge of human nature, we still continue to lay down rules for his guidance without regard to the realities of the situation.

In order that you shall not judge me deficient in respect for the proprieties sanctified by tradition, I set before you here a tabular presentation, both of the facts of infectiousness and the rules to be observed by the patient for their control. God bless and prosper your efforts to secure their observance. I still preserve enough faith in mankind to make every patient who comes to me with an early infection read them through.

SUMMARY OF THE FACTS OF INFECTIOUSNESS

- (1) The more recent the infection, the more dangerous.
- (2) The blood Wassermann is not a guide to infectiousness or non-infectiousness. It may be negative with infectious lesions present and positive in non-infectious cases.
- (3) The most infectious lesions are: chancre, mucous patch, condyloma, moist papule (flexures).
- (4) The places to look for infectious recurrent lesions in inspection are: lip (outer

and inner surface), angles of mouth, faucial pillars and tonsils, sides and bottom of tongue, axilla, nipples, inguinal folds, labia, penis, scrotum, anus (piles).

(5) All open or eroded lesions in early syphilis are dangerous.

(6) Infection is also transmitted by semen and by benign non-syphilitic lesions (herpes) in patients with syphilis.

(7) Syphilis is transmitted mainly by intimate contact of moist surfaces; i.e., by kissing or sexual intercourse.

(8) Moist articles and discharge-bearing dressings and articles of common use can also carry infection.

(9) Thorough washing in hot water and soap disinfects contaminated objects. The additional precaution of boiling dishes, utensils, and such articles as douche nozzles, instruments, etc., in soda solution may be used.

(10) Dry objects, and dry (not crusted) lesions are non-infectious.

(11) Pyogenic infection reduces the infectiousness of the local lesion.

(12) Trauma by an infected object (knuckle striking teeth, needle prick) makes infection almost certain; it may be hematogenous and without chancre.

(13) Transfusion is a means of transmitting syphilis. A single negative blood Wassermann test in the donor does not protect.

(14) There is a distinct infectious relapsing type of syphilis that must be watched for. To such a patient, no assurances can be made.

(15) Local irritation favors infectious recurrence; dirt, sweat, discharges, friction (intercourse) tobacco (smoked or chewed).

(16) Time diminishes the infectiousness of syphilis. After 5 years few cases are infectious; desultory, non-curative treatment, with relapses, may prolong infectiousness many months or years. No treatment can guarantee the non-infectiousness of syphilis indefinitely.

(17) Secondary relapses have been seen with general paresis after 20 years. Inadequate treatment favors infectious relapse.

(18) Late syphilids are not infectious even though open lesions are present. Do not confuse with recurrences.

(19) Mercury does not control infectiousness.

(20) Bismuth, while more effective in this respect than mercury, is probably less so than arsphenamin.

(21) Arsphenamin controls infectiousness, probably as long as 1 month from the last dose.

#### SUMMARY OF PERSONAL HYGIENE INSTRUCTIONS FOR THE SYPHILITIC PATIENT

(1) Do to others in this matter as you would wish them to do to you if you were well and they sick.

(2) Don't kiss. Change your disposition if you have been effusive.

(3) Sleep alone.

(4) Trust wife or husband with the facts.

(5) Have your own towels and dishes at home. When away, eat where you know they scald the dishes.

(6) Never use another person's shaving tools, his cup or dipper, his spoon or other eating tool, his pipe or cigarette holder, his toilet articles, and never let him use yours.

(7) Consider every open sore infectious until you have seen your doctor. Burn the dressings.

(8) Watch for "patches", cold sores, cankers, pimples, chafes and piles, and see your doctor if they appear. Consider yourself infectious.

(9) Get your doctor's instructions relative to sexual matters, and follow them.

(10) Don't smoke, if you are within 5 years of the beginning of your infection.

(11) Don't worry. Keep free of mental strain as much as you can.

(12) Sleep 8 hours a night.

(13) Avoid over-work, but keep reasonably busy.

(14) Gain weight unless your doctor says not.

(15) Exercise as usual in the open air, unless otherwise instructed.

(16) Avoid chilling and getting wet.

(17) Report all colds, coughs, sore throats, and other infections to your doctor while you are under treatment.

(18) Avoid injuries. They may start



trouble. Be especially careful to avoid sprained joints and blows on bone.

(19) No alcoholics.

(20) Realize that your chances are good for recovery, and make the most of them.

There is one way in which the physician can further the value of the patient's coöperative effort in the prevention of infection. This is through thorough examination and re-examination at every possible opportunity during the early years of the disease, to detect the presence of a relapsing tendency, and of actual relapse lesions as such. In spite of what I have said about the unreliability of the Wassermann test as evidence of infectiousness, it does have a certain significance in the early months of treatment. Moore and Kemp have shown, that a relapsing tendency is indicated by the too early decline of the Wassermann to negative under treatment. It is also well known that recurrence of a positive after a series of negatives in an early case is a warning of the existence or prospect of relapse in some group of structures. It is, moreover, known that seronegative primary syphilis which becomes positive within a few days after the first injection of an arsphenamin, behaves much as does seropositive primary syphilis with respect to an increased tendency to relapse when treatment is stopped. Finally, there exists in man as in animals, a definite relapsing type, which does not accumulate resistance to the disease except at the expense of repeated cutaneous reactions, most of them in potentially infectious form, during the first 5 years or so of the disease. These are the patients with delayed secondary eruptions especially. To utilize these considerations in practice calls for frequent repetitions of the serologic tests within the first weeks or months of the disease (Moore and Kemp performed them once a week); and systematic search for the recurrence of infectious lesions about the mouth, throat and genitalia, especially after treatment is suspended. It is impossible to over-emphasize the necessity for thoroughness in such re-examination of treated patients. No swivel-chair examination and "Oh you look all right" technic will do the work. It is necessary to

burrow into the corners with light and tongue blade; to evert the prepuce, paw over and inspect the scrotum, especially the posterior surface, and see the anal opening; to attentively study the flattened palms and soles. I know from experience how irksome and time-consuming this is, but you will be rewarded by some startling discoveries among your supposedly cured patients. Look especially for mucous erosions, supposed fissures with greyish pellicles, "warts", supposed hemorrhoids, "herpetic" lesions on the penis, and the ringed recurrent lesion of the scrotum.

*Control of infectiousness by treatment.* An understanding of a few fundamental principles here aids in the application of rules and standards to the individual case. Contrast for the moment the situation of public health control with respect to syphilis and tuberculosis. In the latter disease, education, isolation, and hygienic attack are still our chief weapons. In syphilis, while these methods have their worth, they are of minor import because they cannot stem the countercurrent of the basic urge which underlies the prevalence of the venereal diseases. Without a new weapon, we would be as we are with gonorrhea, at a standstill. Our new weapon is chemotherapy, as yet unknown in tuberculosis, but already far advanced with respect to syphilis. It is not too much to say that it is arsphenamin, and arsphenamin alone, that makes hopeful the ultimate extinction of the disease. It is essential, therefore, to understand the action and peculiarities of the arsphenamins if we wish to do our utmost to control the disease.

*Action of the antisiphilitic drugs.* Action of the arsphenamins is clarified by a comparison with that of mercury and bismuth. An arsphenamin acts upon the spirochete through the medium of its oxidation products, and destroys it outright with comparatively little effect on the tissues. Mercury, on the other hand, in the body, has little effect on the spirochete, but acts rather by stimulating tissue resistance to the organism, and perhaps by stimulating the cell to make its own slow and only partially effective resistance to the disease. Bismuth is intermediate between these types of action, a better spirillicide than mer-

cury, but a much poorer one than arsphenamin. The action of an arsphenamin upon infectiousness may be summarized by saying that an effective arsphenamin in adequate dosage destroys every surface organism, and hence renders the patient non-infectious within 24 hours. The duration of this sterilization is short, and is made permanent only by repetition of the doses at intervals not greater than a week, for a long series. The action of mercury with respect to infectiousness is summarized by saying that condylomas swarming with spirochetes may develop around the anus, right in the middle of a course of the most popular insoluble mercurial salt (mercury salicylate). Bismuth will sterilize, but its action is 3 to 8 times as slow as that of an arsphenamin.

Arsphenamins vary in their spirochete-destroying power. Neo-arsphenamin, though so popular, is notably uncertain in this regard, and Dale and White were able to show that a good deal of what was labelled and sold as neo-arsphenamin in Great Britain during the war, was powerless to destroy the *Spirocheta pallida*. Voegtlin confirmed some of these observations for neo-arsphenamin made and used in this country. It is important to realize that the spirochete-destroying power of an arsphenamin is not due to arsenic as such. For that reason, other arsenicals, especially the pentavalent drugs such as tryparsamide, and the cacodylates, have no value in tracing infectious syphilis, for they are feebly or not at all spirillicidal. It is the valence of the arsenic-linkage to the dye base that counts.

The complete dependence of the prevention of infectiousness, not to say even the so-called cure of the disease, upon the arsphenamins is perfectly illustrated by a number of recent clinical observations. Moore and Kemp found a definite decline in the frequency of recurrent secondary syphilis proportional to the number of arsphenamin courses received by their patients. Of 196 patients receiving from 1 to 8 injections of an arsphenamin, 80% had potentially infectious recurrences; of 89 receiving 6 to 12 injections, 10%, or only half as many, relapsed; of 46 receiving 13 to 20

injections, 10%, and of 71 receiving 21 to 40 injections, only 5.6% relapsed into potential infectiousness. Besancon, Schoch and I found in my own clinic that 85% of our patients who relapse with the appearance of infectious lesions have had less than 12 arsphenamin and 10 heavy metal injections, a figure which exactly confirms the 88% found by Moore and Kemp. The study presented before the International Congress of Dermatology and Syphilology this summer showed with clearness and exactitude based on large numbers of cases collected from 5 coöperating American clinics, that the critical point for a large proportion of patients with reference to the prevention of potentially infectious relapse, lies between the fifth and the ninth injection of "606". Even with identical amounts of heavy metal in both groups, those who received only 1 to 5 injections of arsphenamin relapsed 5 times as often as those who received 5 to 9 injections.

Modern treatment, then, depends for the prevention of infectiousness, on the arsphenamins, and not on either mercury or bismuth, essential though these elements are in the successful outcome and "cure" of the individual. The patient in the first 2 or 3 years of a syphilitic infection who receives from his physician less than 20 arsphenamin injections, remains a vastly greater danger to his contacts and the public health, than does the patient who receives more than 20 injections.

My time allotment must have consideration—so that I know you will pardon the didacticism of a succession of short summaries setting forth application of the foregoing principles to various special phases of syphilis, to which we shall now proceed.

*Control of infectiousness in early syphilis (first 3 years).* This is "Today's World Problem in Disease Prevention". Let me stress to you the vital importance of 2 factors, time and arsphenamin; *time*, because every hour gained in putting an early infection under treatment nips future contacts, and increases the proportion of radical cures; *arsphenamin*, because, as I have shown you, it is the only quick destroyer of the organisms, and the ab-



solute leader in the field of infection control. On the question of time, I might harangue you on the darkfield, as all of us have done; and leave you without the knowledge or equipment to use it. I recognize the individual impracticabilities of the darkfield, and I therefore urge you not to buy the instrument and use it, but to require of your state laboratory that it develop a darkfield service comparable to its present Wassermann service, and supply you with the pipettes and mailing cases to secure for your patients with suspected chancres darkfield examination of the chancre serum within the first few days of the life of the lesion, while the blood is still negative to Wassermann and Kahn. If your state will not provide the service, get it from the hospital or pathologist in your neighborhood. Develop a local darkfield man who knows his spirochete when he sees him, and try for cure in the seronegative phase. Refuse to listen, first of all, to those of the "Old Guard" who advise you to wait for secondaries to appear, in order to "give the patient a good reaction". There is absolutely incontestable evidence that though this may affect somewhat the tendency to recurrence, it reduces the prospect of cure for the individual 25 to 40%. More than that, withholding arsphenamin maintains for days and weeks a focus of dissemination of the disease in the community, not subject to quarantine, and unquarantinable even if regulations existed, that spreads syphilis broadcast as of old. Throw the detail man out of your office who advises you to try his firm's intravenous preparation of bismuth alone on an early case—or any other preparation but an arsphenamin compound. The French have tried bismuth this way, to their sorrow. Even the contrast between an arsphenamin and an arsphenamin-bismuth compound is illuminating in this particular, for an arsphenamin alone in adequate dose is 3 or 4 times as fast a sterilizer of active lesions, as is the arsphenamin-bismuth compound — bismarsen; though properly used, bismarsen is apparently the superior from the curative standpoint. It is possible without in any wise sacrificing the interests of your individual patient to preserve fully and further the public health con-

cern in the early effective use of an arsphenamin.

Of the subsidiary principles involved in the control of infectiousness in early syphilis, I would offer these. Allow no rest periods in the first 18 months, for these lead to relapse. Use a heavy metal, preferably now-a-days bismuth, side by side with and in the intervals between arsphenamin courses. Be moderate in dosage, but effective, for less than 0.3 gm. of an arshpenamin is of doubtful utility, and more than 0.5 gm. of "606" or 0.6 gm. of "914" may destroy tolerance and cut treatment short. Mass the patient's treatment early, giving the injections closer together at the start, and getting all the treatment you can into the patient within the first 3 or 4 months. Then *keep on*, and try in every early case to reach 36 to 40 injections of an arsphenamin in courses of 12, 10 or 8 injections, plus the accompanying bismuth. Never, no matter what the stage or circumstances of the case at the start, give abortive cures, a single course of 8 injections or less, and put the patient on pills or any other form of treatment than a continuance of his arsphenamin. Abortive cure has disappeared from the practice even of Germany, which originated it. Treat every case to a maximum, determined, not by your personal experience with a few patients, or your detail man's experience with none, but by that of the syphilis clinics of the world as presented in the literature and through your state and national venereal disease services.

*Control of infectiousness in late syphilis.* Here the time factor is paramount. Lose your dread of the gumma and the tabetic patient if you have any, for transmission of the disease does not lie at their door. I believe it was Hoffman who reported the famous example of a man with gumma of the penis, who, though by no means abstemious in unprotected intercourse, did not transmit the disease to his uninfected partner. Latency in marriage, is, of course, a special problem, to be presently mentioned, but, in general, one need not fear the infectiousness of late syphilis nor make life unduly hard even for prostitutes who have had the infection for a decade or more.

*Control of infectiousness in sexual relations*

and pregnancy. You will notice, of course, that I have not said "marriage and pregnancy"; for I would wish you in considering this matter to be realistically rather than moralistically minded. Marriage is only a part of the problem, as one well realizes when a seemingly intelligent young man replies to his doctor's warnings by saying, "Why of course I would not stay with any *nice* girl, Doctor, while I have this thing". Whether for better or for worse, the niceties have faded out of the modern situation with decline of the double standard, and the instructions to the patient and the course to be pursued in reference to possible sexual contacts must be the same for the married and the unmarried. Therefore, I suggest that you lay before all patients, in the first interview after diagnosis is made and the first treatment given, the facts I have recounted to you, regarding time-treatment relations in the transmission of the disease. I suggest you set 40 arsphenamin injections, rather than 5 years, as a probable landmark in the resumption of sexual activity. Then, if you live in a state or community where enlightenment is possible, remember that infectious recurrence involves especially the penis, the vulva, and the mouth parts, and that the semen may be infectious. Keep them apart by impervious protection rather than chemically. Though I speak in terms of almost urologic barbarity, I would not belittle the influence and worth of ethical pressure, and would spar for time between infection and my patient's resumption of sexual activity by every device known to the temple, the court and the sawdust trail. I fear to seem facetious or cynical, for these issues are critical, and a religious or moral appeal that holds even an occasional man to arsphenamin and keeps him from women, has public health worth. Remember again not to base decisions as to infectiousness on negative serologic tests, lest you wreck some innocent woman or child by premature permission to a husband. And, once you have in your best judgment authorized sexual activity, keep constant check upon it in the early years, limiting it to the times when the patient is under arsphenamin control, if possible.

The problem of preparation of the intelligently coöperative man or woman for the conception or bearing of a child is still on a theoretic basis, for so few patients can be kept under the necessary control for the purpose. In theory one should prepare both the syphilitic man and woman for the conception of a child with an arsphenamin and bismuth course. More frequently we are called upon to deal with the situation and prevent infection of the child only after conception has occurred. On this matter there can no longer be 2 opinions. I cite you simply for concreteness the notable statistics of Boas and Gamlemtoft (Nabarro, Brit. Jour. Vener. Dis. 1928, 4:107). In a total of 201 cases of syphilitic mothers receiving no treatment for the disease, 96.5% of the children were syphilitic, and 3.5% healthy. Of 87 syphilitic mothers receiving mercury before pregnancy but none during, 90% of children were syphilitic and 10% healthy. Of 15 mothers receiving arsphenamin before pregnancy, but none during, 80% of children were syphilitic and 20% healthy. Of 111 mothers receiving mercury only during pregnancy, 72% of children were syphilitic and 28% normal. Of 26 mothers receiving arsphenamin before and mercury during pregnancy, 27% of children were syphilitic and 73% normal; while of 105 mothers receiving arsphenamin during or both before and during pregnancy, from 15 to 20% of children were syphilitic, and from 80 to 85% normal. It is unnecessary to point the moral of these figures. Translated into practical terms, every pregnant woman, regardless of age, social status or other circumstances, should have a serologic test for syphilis as soon as she is first seen by her obstetric attendant, and this test should be repeated by the seventh month. Every mother who has or has had syphilis, regardless of the age of her infection, of her serologic findings, whether positive or negative, and almost of her general state, can and should have some arsphenamin, preferably both before and during, but at least during, her pregnancy. The prescription may vary in individual cases, for a syphilitic heart or liver, for example, modifies the rule; but in general, the arsphenamin should be begun early, given through the larger part of



the pregnancy, and be combined with bismuth at least part of the time. The dosage can be moderate, but should not be picayune, and the follow-up of mother and child must be complete and protracted. An enormous harvest of prevented infection with syphilis awaits the adoption of these rules by the profession at large.

*Control of infectiousness in industrial relations.* My time and your patience are hardly lengthening, so that I devote only a word to this interesting subject. The crux of the syphilis problem in industry is recognition of the infected person. Perhaps I might place ahead of this the problem of getting the issue before the czar-like official autocracies that too often bar the way. The principles involved are these, as I learned them in my study of railroad men. Syphilis is overwhelmingly acquired in youth. It is infectious in its early years, and coincidentally it is apt to be serologically positive during this period. The appropriate mass measure, aside from detailed periodic physical examination, is the taking of the blood Wassermann test on all persons between the ages of 17 and 31, on entering employ, and at such intervals thereafter as may be practicable within the age period named. Understand that this Wassermann is taken not to detect infectiousness but to identify the presence of syphilis. Further medical examination is then essential to determine the status of the detected case, which may, of course, not be infectious at all, even though serologically positive.

As a matter of fact, with disappearance of the common drinking cup (if it has disappeared), the transmission of syphilis in industrial relations as such, is probably of small moment. When both sexes work in contact, it is more important to attack the social hygiene problem than the epidemiologic one, through the instrumentality of matrons, effective shop discipline, and education. Even in food handlers, and cosmetic workers, the risk of transmission of syphilis may be exaggerated, though it is true that one sometimes shivers when one watches the technic of barbers, dining-room, kitchen, and soda fountain help, from behind the scenes. Periodic serologic testing of such

persons is probably desirable for detection purposes. The most tragic aspect of the matter is the least known—the children infected by irresponsible and immoral servants in the home. I have seen everything from tabes in the house-mother of a great girls' school dormitory, to a chancre on the penis of a 2-year old baby, traced to the activities of the crooked and infected nurse. Here at least is a field that merits genuine effort at study and control.

*Social hygiene and public health aspects.* The reservoir of syphilis, up to the War, was prostitution, organized and unorganized. It is impossible to quote the vast mass of figures from every source demonstrative of this fact, but in the study of prenatal syphilis and of the infected father and mother which I made preparatory to the chapter of my text on this aspect of the disease, the realization was most clearly brought home to me. Of the fathers of my little syphilitic patients, 90% had acquired the disease extramaritally. Just what rôle the so-called emancipation of women is likely to play in the dissemination of syphilis, is as yet largely material for speculation. I question if the rôle will be a large one—the worldly-wise maiden is beginning to understand the protective virtues of caoutchouc too well to take unnecessary chances, if my impressions from the venereal confessional are any guide. At the same time, Jeanselme and Burnier seem to feel that increasing prostitution is a significant force in the wrong direction. Two or 3 things do seem to stand out, that deserve mention. The younger a prostitute, or a free lance, the more dangerous, for obvious reasons, and hence the more in need of control. This word raises at once the question as to whether there can be such a thing as control. Some very interesting experiments have been tried recently in this direction, among them Kolle's effort to keep prostitutes non-infectious by the injection of what he called "bismuth plugs" intramuscularly, which he hoped would prevent the development of infectious lesions. Nothing notable has been published thus far to my knowledge on the matter. I may tell you that my lifetime's experience with syphilis, such as it

is, has made me an abolitionist. No one who knows the disease seriously expects to control or influence its incidence by the provision of segregated districts and inspected girls. Public health control of venereal disease as it concerns the infection focus centers around the tracing of the source of each and every early infection identified, and the immediate sterilization and supervision of that infectious source by every available means, but most of all by making treatment not so much forced as attractive and easy. Every practicing doctor can contribute to this end by trying to bring in the source from which his patients are infected and by demanding of the state that it interfere here, instead of in the treatment of tabes and paresis, the mere non-infectious end-results. A state social service could do wonders in backing the doctor by bringing in for treatment the foci that spread the disease among his patients. The report and the quarantine, while orthodox weapons, have helped me far less than the 2 or 3 socially minded and intelligent women that used to trace sources for Irvine in Minnesota during the war. The entire policy of a great nation, England, in dealing with the venereal disease, is founded on coöperation and education rather than compulsion—not without some protest, however.

Let us do what we can, too, to spoil the business of the druggist who prescribes and dispenses to venereal patients. He ruins the early detection of the disease too often. And let us not expect too much of personal chemical or packet prophylaxis. I see something of it among men of more than average intelligence, and I doubt if among the average it is worth anything at all. A half-drunk man and a prophylactic packet are no match for the spirochete. Remember that it is station prophylaxis under organizational conditions that worked the wonders on the venereal situation in the War.

*Control of infectiousness in physicians, dentists and nurses.* You remember the ancient saying that "curses like chickens always come home to roost". My closing paragraph is the appropriate place for such a consum-

mation. No one who deals with syphilis day in and day out can fail to realize the tragic incidence and the deplorable outcomes of the disease among those whose professions bring them into contact with it. Several facts have high significance here. Syphilis is the *dangerous unexpected*. It is not the syphilologist who acquires it, even from a lifetime of potentially dangerous contacts. It is the practicing doctor, secure in ignorance, of a low index of suspicion, of a mistaken casualness and bravado, and irresponsible in treatment who meets ruin in this way. It is a legitimate demand on the public in protection of professional attendants, that patients submit to a routine test for syphilis as a part of every medical examination. Now that the precipitation tests are coming to the requisite simplification (as witness the presumptive Kahn and the finger-test Kline), it is no longer necessary to remain in ignorance of a patient's condition on this important point. One can know that one is dealing with potentially infectious material within 20 minutes, where such facilities are available. Nowhere will such a help be more important, if I may digress momentarily, than in the prevention of transmission of the disease by blood transfusion, one of the most shocking and regrettable miscarriages of modern therapeutics that can befall a hospital or a medical staff.

Two additional items calculated to protect the profession from accidental syphilis are an adequate light in examination of patients in the office; and, an absolutely unbreakable habit of inspecting orifices. If the examination of the fourchette and labia before passing the palpating finger; of the commissures, buccal mucosa and throat before introducing dental instruments; of the anal and vaginal openings before passing tubes and thermometers; were conducted with a good flash lamp, many a finger and many a life would be spared. Good gloves, new gloves, and condign punishment for pinholed gloves handed to an examiner, would mean much. The habit of warning the patient not to cough; the learning of that difficult art of looking *at* not merely, through or past the small things one encoun-



ters on an orificial inspection; these would help. Special realization of danger on the part of those who deal with the woman's invisible genital tract in diagnosis and treatment, and those who operate upon the nose, throat and anus, where danger is always imminent and always unexpected, would help. And when infection occurs, some medical knowledge of the extragenital chancre—which is not a felon, not a boil, not a sarcoma, not “just an infection”, would help, too. Induration, indolence, and satellite adenopathy, the 3 keystones to physical diagnosis of the chancre, could help us to an early darkfield, and early diagnosis, and a probable cure, much oftener than they do.

I would recommend it to you as a protective procedure, that your patients with recognized and not recently treated syphilis who are up for operation, receive, if no emergency or special aspect of the disease contraindicates, 1 or 2 injections or 0.45 gm. neo-arsphenamin before they are operated on. At least ask the advice of a syphilis man on the matter. I know the risks of surgical infection with syphilis are small in some aspects of the work; that there are hoary-headed masters of the surgical art who have come through 40 years of operating untouched so far as they know. But I have seen too many men marred.

Writing this paper in my study, I picture my audience as hearing with patience and comprehension—perhaps, too, with some considerate indulgence—the effort of one who was once kindly called a crusader, to bring this subject home to you. Being generously disposed to strangers, and, as your records show, genuinely concerned over this aspect of the public health, your enlightened outlook will accept, I know, the conclusion of the whole matter. *The responsibility for the modern control of the infectiousness of syphilis is not in the hands of the church with its preaching, the law with its mandates, or the laboratory with its drugs. It lies today, to be met or ignored, with the everyday doctor.*

## VALUE OF BLOOD SEDIMENTATION TEST IN GYNECOLOGY

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During the past few years a great deal has been written on the clinical significance of the sedimentation test, which has been on trial for some years in this country and abroad. Its value has been emphasized by the following investigators: Popper and Kreindler find the test a valuable aid in diagnosis and prognosis. Netschman uses it in differential diagnosis, especially in conjunction with a complete blood count. Frosch believes the sedimentation test more delicate than the blood count can be. Barr and Reis, from Michael Reis Hospital, in Chicago, and Friedlander, of Detroit, advocate it in gynecology. Some workers report unsatisfactory results, such as Cherry and Schmitz, whose difficulty would seem to be one of interpretation. The figures obtained by them and on which they base their condemnation of the sedimentation test are so at variance with the rates obtained in the various gynecologic case types by practically all other workers in this field as to warrant the impression that their cases were complicated by undetected remote foci of infection or were of mixed pelvic pathology. Men like John Osborne Polak have had tests made on every patient admitted to the gynecologic wards of the hospital and 1000 readings have been made from which the rates of sedimentation have been tabulated and definite deductions drawn. In gynecology a large proportion of our operative work is elective, and we must strive to eliminate every possible factor which may contribute toward a prolonged convalescence, especially factors involving the recognition and elimination of infection.

It might be well to emphasize at once that we are clinicians and not laboratory technicians. We are treating patients and not simply making tests, and of course the clinical course is the outstanding factor in handling our patients. We use the leukocyte count, temperature curve and, in addition to our

clinical data, the proper interpretation of the sedimentation test. This investigation was undertaken by our service in order to determine whether the blood sedimentation test offers additional information of either diagnostic or prognostic value. If this test adds something to our clinical knowledge that may help us to determine the presence of latent infections, and when to operate and when not to interfere, it is worth using routinely, considering its simplicity.

Let us briefly review the history of the sedimentation test. The hastened settling of inflammatory blood has been known to physicians for centuries and was considered a particularly important clinical sign, both theoretically and practically. With cessation of blood letting and the advent of cellular pathology, it practically had become forgotten and is now observed again independently by a modern investigator with a new meaning and in a new light. Many writers credit Galen as the first to call attention to this phenomenon under the name of "Crista Phlogistica". John Hunter studied the phenomenon of blood sedimentation in 1791. He not only observed that the erythrocytes settled more quickly in their own plasma, but he was also the first to demonstrate that the red cells of normal blood when separated and transferred to the plasma of inflammatory blood, settled with greater speed, the rapidity of this process being in direct relation to severity of the infection. In 1918 Fahrens rediscovered the phenomenon of blood sedimentation in pregnancy and started the present wave of investigation. It has since been observed and studied in tuberculosis, cancer, various forms of joint disease, pneumonia, scarlet fever, pelvic inflammatory disease, syphilis, anemia, and many other conditions.

It is not within the scope of this paper to discuss the various theories advocated to explain the sedimentation phenomenon. It is safe to say, however, that out of the host of theories propounded, from auto-agglutination, electrophysical reaction and increased fibrogen content of blood plasma, down to the presence of some specific ferment in the plasma, there is not one universally acceptable explanation. Regardless of theory, the ultimate cause ap-

parently depends upon the degree of cellular destruction going on in the body. The sedimentation reaction is generally regarded as a measure of pathologic activity and therefore as a symptom of a general kind. It is a fine quantitative measure of the change in the blood produced by a destructive process somewhere in the body. It does not diagnose, nor does it localize the infection. It does not indicate the state of the diseased organ, but it does reflect the disturbance produced in the organism through the absorption of products of infection.

There are 2 recognized methods of sedimentation reading. The first, *time method*, is advocated by Linzenmeier. This method fixes the distance and observes the time, recording the results in minutes. The second, *distance method*, employed by Westergren, where he fixes the time and measures the distance recording the results in millimeters. Although most investigators in this country choose the Linzenmeier method, we felt that the Westergren method was easier for reading and more exact for results.

The Westergren technic, as employed by us, is as follows: To prevent blood coagulation, a 2 c.c. syringe is filled with 0.4 c.c. of 3.8% sodium citrate solution. The cubital vein is punctured and 1.6 c.c. blood is withdrawn, which means that the syringe is filled up to the mark of 2 c.c. and the blood sodium citrate mixture is then put into a test tube. By shaking, we attempt to get an equal distribution of the blood cells. The blood is sucked up into a pipette which shows a scale of 200 mm. The content between the zero mark and mark 200 equals 1 c.c. It is not necessary to fill the pipette immediately after the venous puncture, as the citrated blood gives the same sedimentation after standing in the test tube for a few hours. The pipette is fixed then into a frame and time noted. After a certain time the sedimentation of a red column in the pipette is noticeable. We read usually after 1 hour, a second time after 2 hours, and finally after 24 hours. The most important reading is the first hour.

The important question to be answered is whether the sedimentation test has a practical application. Its practicability so far as technic



is concerned is obvious for the test is simple and requires very little laboratory equipment. The fact that in normal individuals the sedimentation is between 2 and 5 mm. in the male and 3 and 7 mm. in the female individuals, while sedimentation in inflammatory cases varies according to severity of the process, indicates the value of the test. It is a more precise reagent than the thermometer, for absorbability of infected material is promptly recorded by variation of blood sedimentation even when the temperature remains normal. We cannot always claim that increased sedimentation indicates an infection in that part of the body upon which we are directing our attention. We know, however, that there is an infective process in some part of the body and that we must try to eliminate all error in diagnosis; i.e., when the infection is not found where it was suspected a thorough search may locate the infection elsewhere. We read a rapid sedimentation and operate suspecting diseased adnexa, but instead we find normal adnexa, and if we search further we may find a diseased appendix or gall-bladder to account for the rapid sedimentation.

The sedimentation test is especially valuable in those cases of adnexal disease where there is a latent infection with a normal temperature and normal blood count. Very often the surgeon operates and finds such a latent infection, which lights up and causes a stormy convalescence, or even jeopardizes the life of the patient. We consider an increased sedimentation, above 50, a sign of latent infection and although temperature and blood count are normal, postpone operation until tests indicate a sterile field so far as operation is concerned. Whenever sedimentation is used, operations have not been complicated by the presence of unsuspected latent infections, which indicates that the test succeeds in showing the existence of such a condition. Because it is known that operations increase the morbidity and mortality in such infected cases, the exclusion of a latent infection is only possible when the sedimentation is not more than 10 to 15 mm.

Too much emphasis cannot be laid on the importance of repeated readings. The clinical picture and physical findings may seem to re-

main unchanged, the temperature curve and leukocyte count may show no significant variations, while the sedimentation time is changing in direct relation to the changing condition of the patient. This holds good not only in determining safe operability, but even more strikingly in making a prognosis.

In the opinion of most authorities and this is borne out in our experience, it is possible to classify all gynecologic conditions according to their sedimentation. Normal sedimentation test occurs in the following: (1) Malposition of the uterus; (2) polyps; (3) plastic operations. The readings will not exceed 10 mm. for the first hour.

Cases of pelvic pathology whose sedimentation comes nearest to normal are: (1) Simple ovarian cysts; (2) dermoid cysts; (3) hydrosalpingitis; (4) uncomplicated myoma. As a rule, they never exceed 15 to 20 mm. within first hour. In the presence of an active infection, i.e. acute salpingitis, degenerated fibroid or mixed pelvic infection, the test shows a strikingly increased sedimentation ranging from 70 to 120 for the first hour.

An individual interpretation is required in malignancy and ectopic pregnancy. An unruptured ectopic shows only a slightly increased sedimentation. A ruptured extra-uterine pregnancy shows an increased sedimentation which is in direct proportion to the amount of bleeding and destruction of red cells. The larger the amount of free blood in the abdominal cavity, the higher the sedimentation. Of course the safety limit of 50 mm. for the first hour does not apply in the case of ruptured ectopic, any more than it would apply in cases of obstruction where operation is vitally indicated.

Another special consideration must be given to malignancy. Here the sedimentation reading is directly proportional to the amount of tissue destruction. An early malignancy shows slow sedimentation which increases as the destructive malignant process goes on.

I will now try to illustrate the value of this test by reading a few typical case histories.

To begin with, in our group of normal or low readings—ovarian cysts, malposition of uterus, and plastic operations with a reading

of about 10—we found the white and differential count in the majority of cases to conform with the sedimentation test. Where a discrepancy existed we gave preference to the sedimentation test. We might add here that where the sedimentation was normal or low we did not find at operation any latent infection and the patients made an uneventful recovery.

The first case for illustration is a patient in the hospital now. Mrs. S. Lien, admitted with the diagnosis of left salpingitis, temperature 101°, pulse 120, blood count 8900, and differential only 69%. Sedimentation taken and found 98 for first hour and 129 second hour, which is rather high. After a few days' rest, first hour reading 84 and 121 second hour. In spite of the low blood count and differential of 69%, we are inclined to believe that the diagnosis is acute salpingitis, with possibility of pus. We examined this patient vaginally 2 days later and her temperature rose to 103°.

In this case the sedimentation tests is in conformity with the clinical picture and temperature curve, while the blood count and differential would tend to mislead us as to the existing pathology. In such a case we postpone operation until the sedimentation is below 50 for the first hour although the temperature and pulse may become normal. By doing this we hope to avoid a stormy convalescence.

As a counterpart to the preceding history, the following case might be of interest. Mrs. J. R. was admitted with the following history: For the past 5 weeks she had experienced a pain in the right lower abdomen, radiating to the right extremity and the rectum. Later, the pressure on the rectum was the most pronounced symptom, causing a constant tenesmus. Bimanual examination showed a palpable mass in the posterior cul-de-sac, which was not fluctuating, and a tentative diagnosis of pelvic abscess was made. Temperature 102°; pulse 100; leukocyte count of 26,250, with 89% polys; but the sedimentation was normal. We did a posterior colpotomy. No evidence of pus being found, she was treated conservatively and went home within a week

without any pelvic pathology, and she is apparently still well; proving that the sedimentation test result was correct in spite of the clinical and laboratory findings.

A third interesting case follows. Mrs. Ray Petesky, admitted with diagnosis of "possible ectopic". History of vaginal bleeding, pain in lower abdomen, difficulty of micturition and defecation. She had missed 2 periods. Had been previously operated on at Royal Victoria Hospital, in Montreal, for ruptured right ectopic. Temperature on admission 101°; pulse 100; white count of 1400 and 76% differential; Hb., 68%. Vaginal examination showed uterus enlarged, with an indefinite mass on left fornix. So far, the diagnosis of ectopic appeared to be amply justified. Sedimentation was taken and found to be 134 for the first and 137 for the second hour; which is maximum rapidity.

We reasoned as follows: Unruptured ectopic would give a low reading; not higher than 40. Ruptured ectopic would give reading in direct proportion to the amount of free blood in the abdominal cavity. In this case there was no evidence of internal hemorrhage and we therefore came to the conclusion that we were dealing with a superactive salpingitis. The operative findings disclosed a left tubo-ovarian abscess, and that was substantiated by the pathologic report.

Another interesting group is that of malignancy. Mrs. G. was admitted with diagnosis of tumor of left ovary. For past few months she had occasional sharp pains in left lower abdomen, radiating downward. Moderate vaginal discharge and regular menstruation until last month, when she menstruated twice, the second time very profusely. Temperature 98.4°; pulse, 80; leukocytes, 13,200; polys, 76%.

On bimanual examination, large cystic mass felt on left side. Diagnosis was made of left ovarian cyst. The sedimentation test showed 72 for first and 96 for the second hour, and our diagnosis was accordingly changed to malignant cyst. Operative finding and pathologic report showed a papillary cyst, adenocarcinoma of the ovary.



The value of the sedimentation test can be summarized in the following manner:

(1) It is an aid in differential diagnosis and prognosis.

(2) A sensitive means of recognizing the presence of inflammation and tissue destruction.

(3) The only guide in determining the most favorable time for operative intervention.

(4) In pelvic inflammatory conditions we consider a reading of 50 or less as a favorable time for operation.

(5) The test is a more sensitive means of indicating inflammatory changes than is the white cell count or temperature curve.

(6) In malignancy the sedimentation corresponds with the degree of tissue involvement.

(7) In fibroids the test will show in what cases we may expect inflammatory complication, for an uncomplicated fibroid shows a normal sedimentation.

In conclusion, it is hardly necessary for me to call attention to the importance of correlating the sedimentation reading with the history, the clinical picture and pelvic signs. I merely assert that it is easier to do a sedimentation test than to make a blood count, and that you will get more information out of a sedimentation test than from a blood count in the presence of a latent infection.

This applies not only in gynecology but to a variety of other pathologic conditions in other branches of medicine and I would make a plea at this time to the other services that it be used routinely and they become convinced of its value in their own branch of work. To quote Dr. Polak: "The sedimentation is not a panacea, it is valuable because a high reading means infection—a low reading means that infection can be excluded; for the sedimentation test never lies."

I desire, at this time, to thank Dr. Yaguda for his kind coöperation in introducing this test as a routine measure in our hospital; and also Dr. Glass, who was assigned to this work on our service.

## THE ACUTE ABDOMEN\*

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I hope the experience of many years of active work in study of the pathology of the living, solving many riddles and disentangling many alliances, may be of help to you in unravelling some of the difficulties that concern diagnosis and treatment of acute disease of the abdomen. I will confine my discussion to the "idiopathic" abdomen.

Before proceeding, let me remark that in no emergency is clinical acumen a more valuable asset than in the "acute abdomen", for much as I value aid of the laboratory in the diagnosis of certain diseases, I am free to state that in acute abdominal disease, such as a perforated appendix, perforated gall-bladder, perforated duodenal ulcer, ruptured ectopic pregnancy or a twisted pedicle of an ovarian cyst, the laboratory has little if any place, with exception of the blood picture and the sedimentation test in acute pelvic infection, in the diagnosis; but that diagnosis depends most upon clinical facts and clinical experience, and since diagnosis to a large extent affects prognosis, it is sound clinical knowledge that counts in the end.

The first thing to be considered when confronted with an acute abdominal condition is to determine, if possible, the underlying cause, the momentous question of operation, and eventually the most favorable time for operation. Sometimes all these questions can be decided by the appearance of the patient; that is, the evidence of hemorrhage, syncope, shock, cyanosis; the position of the patient, whether fixed or restless; the type of peristalsis; the history, if available, of previous attacks; the nature of onset, character and site of pain, presence of nausea and vomiting; and the sequence of these 3 items—the site and the degree of tenderness and the rigidity.

When approaching the bedside the common causes of the acute abdomen should be borne

\* (Read before the Atlantic County Medical Society at Atlantic City, Dec. 12, 1930.)

in mind. First and foremost is appendicitis. Next in order are cholecystitis, perforated peptic ulcer, intestinal obstruction, acute pelvic inflammation, ruptured ectopic pregnancy, pancreatitis, twisted pedicle of an ovarian cyst, diverticulitis, occasionally partial or complete torsion of the great omentum, mesenteric thrombosis, and especially one should not overlook a small lump at the site of one of the hernial orifices, or at the site of a scar the result of a previous operation, that may be a strangulated hernia.

In spite of the fact that appendicitis heads the list of causes of abdominal infection, it is not at all unusual to be misled in the diagnosis and to mistake it for some of the other diseases, and vice versa. Every busy surgeon, no doubt, has had the experience of opening the abdomen for a supposed disease of the gall-bladder or a peptic ulcer, to find that a diseased appendix has assumed the rôle of the upper abdominal condition, the other organs being intact. Thus, an acute fulminating appendicitis may present the familiar signs and symptoms of acute perforative cholecystitis or perforating ulcer or acute pancreatitis. The source of this error is due to the power of mimicry of the appendix, which in turn rests largely on the different positions the appendix may occupy. An appendix in a position higher than normal is especially prone to simulate disease of the gall-bladder, and if perforated at the base and the perforation is large, simulates a perforated peptic ulcer. I have operated under these circumstances, believing the case to be one of perforated ulcer, to find a high-lying perforated appendix and a peritonitis with no attempt at walling off, making me fearful of further surgery; therefore, I closed the wound, placed the patient on anatomic and physiologic rest, and later, when the peritonitis had subsided or become localized, I have taken out the appendix. While the power of mimicry of the appendix applies particularly to the chronic ailment, it is not at all unusual for a high acute appendix so closely to simulate an acute cholecystitis, especially in the absence of a definite history of gall-bladder disease, as to make it impossible to differentiate between the two, at least not until the early

muscular rigidity has somewhat subsided, so that by palpation the point of greatest tenderness can be determined and the diagnosis more nearly approached. In the early stage of the acute abdomen the rigidity is generalized, and palpation, usually so significant a physical sign, loses much of its value, so that the question of immediate operation depends largely on what can be learned by questioning the patient or his family, the patient's general condition, and last, but not the least, upon experience with similar cases. We all know, however, that operation at this early stage, before peritonitis has advanced, will give the best results when the peritoneal involvement is usually confined to the site of the lesion and the surgeon is able to protect the peritoneum against contamination. In this stage, pathogenic organisms are rarely found in the smears taken at and beyond site of the lesion. Later on, however, the infection becomes diffused, especially if nature has not been able effectively to place her barriers. Diffusion makes for confusion and adds to the seriousness of the situation. To operate in the presence of a diffusing or a localizing peritonitis may be likened to stirring up a hornet's nest. Generalized abdominal rigidity is due to peritoneal irritation, the fore-runner of peritonitis, while when the rigidity is more pronounced at a given point it is a sign of incipient peritonitis. Rigidity, not general, together with circumscribed tenderness, is the finding in perforated appendix and perforated gall-bladder, as against generalized rigidity significant of perforated ulcer with the absence of decided tenderness confined to a circumscribed area. In ulcer the bacteriologic findings of smears in the first few hours after perforation, at the site of the lesion and beyond, are negative. Here we have the explanation of the well-known fact that practically all cases of perforated ulcer recover if operated upon early. The exceptions are a perforated carcinomatous ulcer and a perforated marginal ulcer. In the former there is infection, the result of necrosis, and in the latter infection the result of the position of the ulcer in the jejunum.

Fortunately, as a rule, perforated peptic ulcer presents few diagnostic difficulties to any



one of average experience. The board-like rigidity is so typical as to be indelibly impressed on the average observer. The first observer, as a rule, is the practitioner and it is upon his prompt recognition of the situation and his prompt action in the emergency that successful surgical treatment largely depends—for surgery is the only treatment. Expectant treatment in these cases is much like the instance in which the wife of a very sick man said to the doctor: "Is there no hope?"—to which he replied: "It depends upon what you're hoping for, madam."

The vast amount of profitable study which has been accorded to diseases of the gastrointestinal tract, including peptic ulcer, has brought with it many advocates of medical treatment for the chronic ulcer. In my experience this has resulted in an increased number of perforated ulcers. The internist and the gastro-enterologist both seem to lose sight of the fact that at least 15% of chronic ulcers sooner or later perforate; that anywhere from 7 to 35% of gastric ulcers are the fore-runners of carcinoma; and that a small percentage of gastric and duodenal ulcer patients bleed to death. This, to my mind, is a valid argument against too prolonged medical treatment of chronic indigestion with ulcer symptoms.

The chief pitfall in the diagnosis of perforating ulcer lies, as has already been indicated, in the mimicry of the appendix. The main points of difference are in the history and the physical signs. The history of ulcer is one of long-standing indigestion while this is not so in appendicitis. In the perforated ulcer seen early, there is neither fever nor increased pulse rate, as in perforated appendicitis. In ulcer there is killing, unbearable pain; while the pain of appendicitis, though severe, is more bearable. The ulcer patient assumes a fixed position, while the appendicitis patient is restless and rolls from side to side. In ulcer there is a general board-like rigidity of the abdominal walls; while in appendicitis the rigidity is limited, as is also the tenderness that in ulcer is general. In a few words, the ulcer patient is the more desperately ill of the two. To this audience all this may be like carrying coals to Newcastle, but I am present-

ing this discussion in what I should like to think a practical manner.

Acute perforation of the gall-bladder may present symptoms similar to those of ulcer, although the history of gall-bladder disease should give the proper clue. In the absence of this information, however, the differentiation is not always clear—except that perforating cholecystitis is rather unusual. Nevertheless, it occurs with sufficient frequency to be borne in mind in the presence of an acute abdominal crisis. Besides the usual syndrome of an acute perforation, jaundice is sometimes present. In both acute and chronic cholecystitis jaundice is the result of cholangitis, usually a lymph-borne infection. The differentiation between acute perforating and acute nonperforating cholecystitis is in the severity of the symptoms and the physical signs, both of which are more pronounced in the former. Differentiation is important because while acute non-perforating cholecystitis usually subsides under anatomic and physiologic rest, acute perforating cholecystitis demands immediate operation. If acute perforating cholecystitis is not operated upon early it will rapidly develop a vicious, dangerous and too often a fatal peritonitis, the severity of which depends on the virulence of the pathogenic organism. In most instances it is the colon bacillus, and not infrequently the infection is streptococcal. In a very small percentage of cases nature takes care of the infection by imprisonment, so to speak, so that the peritonitis becomes circumscribed and the patient may recover from the acute attack and may carry on for a considerable time in reasonable comfort; but, finally, operation becomes inevitable and the findings then consist of a walled-off abscess, the bed of which is the great omentum, which contains stones that escaped at the time of the perforation.

Acute pancreatitis, consisting of 4 varieties, as I have been able to demonstrate at operation—the ultraacute, acute, subacute and the focal—presents differential difficulties, in that with exception of the subacute variety it occurs without warning and is accompanied by profound shock. It is probably more frequent than is generally supposed and many deaths from "acute indigestion" are no doubt

actually due to acute pancreatitis. Even when the diagnosis of acute pancreatitis is made, it is usually too late for successful operation because of the injurious effect of the escaping powerful pancreatic ferments on the surrounding tissues.

The ultraacute variety is rare and so rapidly fatal, because of the massive hemorrhage around and within the pancreas and the lesser peritoneal cavity, that there is little chance of successful operation. The acute variety is more common. In the acute there is hemorrhage beneath the serosa and within the pancreas. Subacute pancreatitis is probably the most frequent of the 4 varieties of acute pancreatitis. In this, the pancreas is enlarged and edematous, and occasionally a small amount of fat necrosis is present. This is often diagnosed and operated on for acute cholecystitis. A more frequent error, however, is the confusion of acute pancreatitis with intestinal obstruction. Why this is so I am at a loss to understand, as the differential points seem to me so conspicuous. Acute pancreatitis, with few exceptions, occurs in middle life or after. The patient is usually stout, a heavy eater and often a fairly heavy imbibor. The onset is sudden and overwhelming. There is persistent vomiting, which fails to yield to lavage, hiccup and cyanosis. The pulse is rapid, there is marked abdominal distension, especially in the epigastrium, rigidity of the abdominal walls and hypoperistalsis or the absence of peristalsis. In acute intestinal obstruction, on the other hand, the pain is intermittent and the pulse is of normal volume and rate; vomiting is temporarily relieved by lavage; peristalsis is stormy and there is no distension until late in the disease. If vomiting persists it becomes of fecal odor—an unmistakable sign of what is going on. Unfortunately, acute intestinal obstruction is not always recognized in its early and most favorable stage for operation. One reason is that so often it follows a dietary indiscretion and is treated with home remedies before the doctor is called. The onset of sudden, sharp, colicky pain, followed by sick stomach and vomiting, is mistaken for severe bellyache. Giving a purgative, as is sometimes done, is disastrous. Unless the suffering is very severe more time

is lost by giving enemas, which even when followed by a stool accomplish nothing but delay in sending for the doctor, and when the doctor finally sees the patient the picture will have undergone a marked change and will have assumed the second stage of obstruction. The belly walls have lost their rigidity, abdominal distension is marked and in some instances coils of bowel are seen, although not so frequently as in chronic obstruction, where the abdomen presents the ladder-rung appearance. Now the vomitus has the characteristic fecal odor, there is hyperperistalsis, rapid pulse and temperature. In the third state—the stage of approaching dissolution—the pulse is rapid and weak, the abdomen is greatly distended and tympanitic throughout, the belly is either silent or merely a tinkling peristalsis can be heard, the pulsations of the aorta are abnormally loud and there is constant regurgitation or fecal vomiting. Operation offers little at this stage, being a last resort, yet it should be done.

Acute obstruction due to intussusception or to volvulus of the sigmoid should, as a rule, be recognized early; intussusception by colicky pain, rectal tenesmus and mucoid bloody stools, and, as a rule, the presence of a tumor detected by abdominal palpation and digital examination of the rectum; volvulus by sudden onset of very acute pain immediately followed by sudden and great distension of the lower abdomen. I impress upon my interns to think first, last and always of the appendix, if it has not been removed, when seeing an acute abdomen, and if absent to think next of acute intestinal obstruction caused by adhesions.

At this point we must again turn to the appendix. As already indicated, the mimicry of this organ depends to some extent upon the position it occupies. The term pelvic appendicitis thus is self-explanatory. It is also sometimes a very convenient diagnosis for disease of the pelvic organs. Owing to the close proximity and lymphatic relationship of the appendix to the pelvic organs, it may be difficult at times to tell exactly where the trouble lies, or at least where it originated. Nevertheless, differentiation between a true pelvic appendicitis from suppurative condi-



tions such as acute salpingitis, salpingo-oöphoritis, twisted pedicle of ovarian cyst, and sigmoidal diverticulitis, is essential, for upon the diagnosis will depend the line of treatment, and if surgery is indicated, the best method of approach. Acute salpingitis, for example, will subside under anatomic and physiologic rest. The error of overlooking an acute suppurative salpingitis can be avoided by a careful history, vaginal examination, making the sedimentation test, the presence of a vaginal discharge, the relative tenderness in the adnexal regions with perhaps some fixation of the uterus, the attempt to move which by pressure against the cervix evokes pain, and the presence of a small palpable mass to both vaginal and rectal touch. An important point in the history is the gradual onset, with the pain in the lower abdomen, unless the lesion be a leaking or ruptured pus tube, in contrast to the suddenness of the appendiceal attack. Bilateral abdominal rigidity with pain referred to the left side and marked tenderness to deep pressure by 2 finger tips on the outer side of the lower-third of the right rectus muscle directed downward and to the left, bespeaks pelvic appendicitis more often than salpingitis. The history of a recent abortion and of gonorrheal infection is decisive. Some authorities depend on the sedimentation test which in appendicitis is normal, and decided in acute pelvic infection. I attach considerable importance to this test, popularized by our colleague, Polak. Twisted pedicle of a right ovarian cyst is often mistaken for acute appendicitis. There is the same sudden onset of abdominal or pelvic pain, nausea, vomiting and more or less exquisite local tenderness and rigidity. The distinguishing feature is the presence of a palpable tumor, usually in a low position. In view of the fact that operation is indicated in either case and also that the appendix should be removed even if the condition is ovarian, the clinical diagnosis is not of primary importance. In a pelvic suppurative appendicitis, the route of approach will depend on the condition and sex of the patient and, if a female, her age. In the female, occasionally the best incision is one through the vault of the vagina behind the cervix; while in the male much depends upon

how sick the patient is, the exact location of the collection, whether above the pubic bone or Poupart's ligament or deep in the pelvis and if fluctuation is evident to rectal touch. The aim of the surgeon should always be to open the abscess by extraperitoneal approach.

The symptoms of ruptured ectopic tubal pregnancy, it seems to me, are so distinctive as to be almost unmistakable. But I admit I have been guilty of an occasional erroneous diagnosis. The history is without doubt the most important diagnostic aid. But this is not always reliable. The similarities of the two conditions, acute appendicitis and a ruptured right tubal pregnancy, lie in the sudden pain, tenderness and rigidity, together with the evidence of shock and syncope due to the hemorrhage. The association of tubal pregnancy and acute appendicitis, though rare, should be borne in mind. Again, operative interference is indicated; refinement of diagnosis is not essential if the best interests of the patient are to be served.

An acute sigmoidal diverticulitis oftentimes simulates an acute pelvic appendicitis. A point in favor of the former is that the signs begin in the left lower abdomen, in fact it is often spoken of as left-sided appendicitis; the pain later may or may not become generalized, and there is a history of antecedent pronounced constipation and discomfort from the accumulation of gas. Etiologically, the disorder is rare in the female, occurring more often in the male at or past middle life. The physical examination is of much moment. Distinguishing points are: tenderness on the left side that is more pronounced and superficial as compared with right-sided tenderness in pelvic appendicitis; due to the distance between the appendix, when in the true pelvis, and the abdominal wall; and finding by rectal touch of a mass or induration in the region of the sigmoid.

If acute perforated diverticulitis of the sigmoid is seen and operated on early, before abscess formation has taken place, a transperitoneal approach is best. In the presence of an abscess, however, especially if it is very low down in the pelvis, it is better to make the approach through an incision in the anterior rectal wall—or, if the patient is a fe-

male, through the vagina. But fortunately, in nearly all cases of suppurative diverticulitis the collection is above Poupart's ligament, where through an incision above the outer-third of the ligament and carried upward and outward, dividing the aponeurosis and separating the fibers of the external oblique muscle, and cutting through the internal oblique and the transversalis muscles, the collection can be evacuated without opening the peritoneum.

The other conditions I have mentioned are rare but they must be thought of if we are to sharpen our diagnostic acumen. Mesenteric thrombosis is characterized by very abrupt and acute agonizing pain immediately followed by abdominal rigidity.

Volvulus of the great omentum is only diagnosed at operation. Its clinical manifestations are those of the acute abdomen in general. When the torsion is complete the signs and symptoms, as I have already stated, are those of intestinal obstruction, but when incomplete they may suggest acute appendicitis.

Right-sided pyelitis in the female is not infrequently diagnosed as high-lying postcecal or postcolic appendix. This is inexcusable, if the surgeon is alert.

When discussing the acute abdomen I am occasionally asked how to differentiate between right-sided pneumonia, right-sided pleurisy — especially subdiaphragmatic — and heart disease, all 3 of which may cause pain referred to the mid-upper and right-upper abdomen. This is a pertinent question, and I am always glad to make an attempt to answer it. In the early, the developing, stage of right-sided pneumonia or of pleurisy, the question of a high-lying appendicitis very frequently arises, and if operation is considered the differential diagnosis is all the more important. In both pneumonia and pleurisy, the former usually being ushered in by a chill, there is pain on breathing, increase of pulse rate and temperature, increased respirations, the presence of a slight cough, as a rule, abdominal rigidity and tenderness of the upper right and mid-abdomen. Increased respirations with or without respiratory discomfort or slight cyanosis, especially in the presence of a high leukocyte count, say 40,000, will cer-

tainly make the careful surgeon apprehensive, to the extent at least of postponing operation for some hours in order to await development of physical signs. Portable x-ray examination, when this is feasible, is of moment. Personally, I have seen enough of these cases to put me on my guard about advising surgery. In subdiaphragmatic pleurisy the differentiation, while not so difficult, is still difficult enough to make one cautious. In cardiac disease with attacks of angina, the pain may be referred to the epigastrium and to the upper right abdomen. This, together with the fact that there is a much disturbed circulation, may suggest the diagnosis of an acute gall-bladder. The surgeon of experience, knowing full well that under anatomic and physiologic rest the gall-bladder condition will, with very few exceptions, subside, will counsel against operation in such instances. The surgeon who has a good working knowledge of general medicine, particularly if he was a doctor before becoming a surgeon, has the advantage of erring less often than he who has not this knowledge.

While in no way claiming any originality or completeness for this discussion, I hope I have succeeded in crystalizing in your minds some of the essentials in the diagnosis and treatment of the acute abdomen as they have presented themselves to me in the course of my work.

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## RUPTURED GASTRIC ULCER; ROLE OF THE INTERNIST\*

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Rupture of a gastric ulcer is not only the most formidable of the acute complications attending this disease but it is also of the greatest concern to the internist because he is usually the first to see the case. Prognosis depends almost entirely upon his decision, since cases submitted to surgery within 6 hours are expected to recover, whereas with

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\* (Read as part of symposium before Surgical Section of Academy of Medicine of Northern New Jersey, Oct. 28, 1930.)



every hour of additional delay the outlook darkens until there is scarcely any hope after 24 hours, notwithstanding that now and then someone records a recovery. By ruptured ulcer is meant a perforation of all the anatomic coats of the stomach into the free peritoneal cavity and extravasation of its contents into the peritoneal sac. The more gastric distension with food, the greater the danger. However, as long as the contents are sterile the danger is minimized by early operation; but if there be a previous stomach infection the general experience is that a serious peritonitis will inevitably follow.

Diagnosis, as a rule, is easy. The first and most important sign is sudden agonizing pain in the upper abdomen. However, Stohr reported a case in which the pains instead of being in the classical position radiated to the right shoulder, thus giving the impression of gall-duct spasm. The pain which follows perforation has been described as one of the most violent and atrocious forms of suffering known. It often occurs after a heavy meal, during work or after some trauma, with evidences of peritoneal shock, fever and a leukocytosis. In the very beginning there may be no abdominal distension, merely board-like rigidity. Very often temperature and pulse show little or no modification at first but within 6 hours, as a rule, the characteristic peritoneal facies appears followed by symptoms of peritonitis with vomiting, distension, fever, rigors, rapid pulse and shock. The appearance of a patient in shock, yet with little or no temperature and a correspondingly low pulse rate, is an invaluable sign in early diagnosis. Since only 45% of patients give a clear ulcer history, one must rely on eliciting a story of periodic digestive disturbances, of obscure or atypical symptoms, with periods of euphoria intervening. Reperforation occurs at times and is apt to be overlooked unless one keeps the possibility of such a contingency in mind, the symptoms of aggravation being laid to progressive peritoneal inflammation; Lewisohn has even noted a third perforation of the same ulcer. In acute ulcer, fortunately representing only 10% of perforations, there may be no warning symptoms at all. Nevertheless, they constitute a serious contingency,

especially when silent perforation occurs. An interesting case was recently reported by Gregoire; perforation of a gastric ulcer with free fluid and gas in the abdominal cavity but at the same time without any distinctive clinical signs. The patient, a woman 35 years of age, was able to walk to the x-ray department, 100 meters away from the ward, and it was only after fluoroscopic examination had disclosed presence of air in the peritoneal cavity that a perforated duodenal ulcer was suspected. As to whether the initial distress attending perforation is due to the giving way of the gastric wall, or to irritation of the adjacent peritoneal surfaces, there would seem to be no longer any doubt. During the discussion of Gregoire's paper, Rouhier related 2 cases occurring in his practice in which the operative findings showed localized peritonitis before there had been time to completely perforate all the walls of the stomach. Guimbellot added 2 similar experiences, and his first case is worth study from a symptomatologic standpoint because of the initial location of the pain; a 40 yr. old man was suddenly seized with severe pain in the right lower abdominal quadrant, and vomiting lasting 24 hr. before the patient was submitted to surgical intervention. The anterior surface of the pyloric region was found to be covered by the transverse colon. No perforation had occurred but a whitish plaque of about 1.5 cm. showed on the pyloric aspect, as well as a similar one on the apposite colon.

The physical signs of localized tenderness with board-like rigidity of the abdominal wall becoming generalized with the progress of infection, dullness in the flank or flanks indicating fluid in the peritoneal sac, augment the diagnosis. In this connection, it is of importance to remember the value of radiology in the diagnosis of perforated peptic ulcer. Vaughan and Singer demonstrated pneumoperitoneum skiagraphically in 63 of 72 patients having ruptured peptic ulcers as proved by laparotomy. Another diagnostic point of value in difficult cases or when radiographic examination is not available has been brought out by Neller. The patient lying flat upon the bed, the finger of the examiner is placed over the naval while pressure is exerted and released. When the naval is loosely closed

this pressure produces a peculiar crepitation which indicates air in the peritoneal cavity.

In immediate postoperative care nothing, as a rule, should be allowed by mouth for 24 hours. On the return to bed, pantopon gr.  $1\frac{1}{3}$  is suggested to insure rest for some hours after the operation; it is less apt to induce vomiting than morphin. Eight to 10 oz. of 5 to 10% glucose in normal saline solution is given per rectum every 4 hours. If these rectal taps are not retained, the Murphy drip may be resorted to. In formulating dietetic management, the mode of surgical treatment which has just been employed ought to be considered; for instance, in the simple suture case, the patient's condition being so serious as not to warrant added risk of the supplemental short circuit procedure, it is wiser to be cautious with mouth feedings. Half hourly drinks of  $\frac{1}{2}$  oz. barley or plain water may be allowed on the second or third day. On the other hand, food deprivation must not be carried too far as Carlson has shown that the fasting stomach is never quiet. Ivy's recent studies in the experimental causation of peptic ulcer in animals have shown that the mechanical factor of strong muscular contractions is quite as important as the acid factor. The justification, therefore, for such feedings is that strong gastric contractions are apt to occur if the patient gets hungry, which might lead to injury at site of the suture. Peptonized milk 1 to 2 oz. hourly up to the fifth or seventh day may be used until cessation of nausea and vomiting. The gastro-enterostomized stomach has seemed to me comparable to the physiologic state of complete relaxation, as the rectum is after divulsion of the sphincter ani, but by the fifth day gastric motility has recovered again and food passes through an unobstructed pylorus as well as through the stoma. This is the time that the ulcer bed begins to granulate and surely none but the blandest food ought to be allowed for the next 4 weeks. However, on questioning patients with unsatisfactory end-results, one finds that this rule is honored more in the breach than in the observance. In my opinion, it is necessary to determine at the time of operation whether atony is present, for this is the type of case that always has stormy post-

operative experiences and is apt to go on to acute dilation. Careful gastric aspiration, using a small Rehfuß tube, is often necessary to remove the accumulating material and oft-times at the end of the day will remove stagnant, decomposing food stuffs. Rectal feeding should be employed exclusively under such circumstances. Where marked dilation of the stomach is found at the time of operation nothing should be allowed by mouth for 2, 3 or more days. There is no danger of strong gastric contractions to such cases because of the severely atonic state of the muscular coat. Rectal and intravenous alimentation will serve the patient's immediate needs. Here again, repeated aspirations will prove of value. This is all the more necessary because the material is usually in a state of decomposition causing elevation of temperature and uneasiness, often vomiting. In a case recently reported by Dixon, aspiration was done daily for 16 days and as much as 1000 c.c. removed at times. When there is persistent vomiting, due to the attendant peritonitis, and danger of recurrent hemorrhage or where there is considerable postoperative dilatation, glucose solutions intravenously and lavage with hot water 120°F. will often tide the patient over until rectal or gastric feedings can be resumed. If rectal alimentation is employed, certain details must be observed. For instance, peptone solution should not be made stronger than 10-20%. If it is, irritation of the mucous membrane occurs and defeats absorption. The same substances should not be given every time. Von Leube showed that the addition of pancreatic extract to the white of egg enema resulted in much better absorption. Pancreatized diluted cream has been shown by Straus to be very easily absorbed through the bowel. Those having a disinclination to retain the aliment can be helped by adding a small amount of laudanum to the mixture. The addition of lactose should not be forgotten, because of the ease with which this carbohydrate is absorbed. In general, during the first few days milk will be sufficient unless there happens to be a specific allergic state. Right at this point it is important to determine from the dietetic history of the patient whether there is any food



allergy, especially in reference to milk or egg, in order to prevent stormy reactions. Vallone's studies in anaphylaxis and gastric ulcer in sensitized animals showed that healing of the lesions is much slower. He concludes that change in the quality of mucus secreted together with the changed constitution of the cells of the gastric mucosa, and insufficiency of antipepsin in these same changed cells, are some of the conditions which account for the failure of ready cicatrization. If these views are correct the great importance of discovering alimentary sensitization in some cases becomes apparent.

In the gastro-enterostomized patient the prevention of jejunal ulcer must be considered from the time of operation. We all know that the gastrojejunal ulcer at the line of suture is, as a rule, due to faulty technic, but in the typical jejunal ulcer the altered physiology is a factor that is too often neglected. On account of the excluded duodenal juices either in whole or in part, the main bolus of food enters the jejunum thoroughly mixed with the acid chyme of the stomach. To counteract this exaggerated acidity mild alkalinization and soft bland food should be used for at least a month. Small doses of calcium phosphate and carbonate are effective for this purpose, but where there is a suspicion or a knowledge of multiple ulcers, or a history of many relapses, bismuth in large doses must be added and seems more effective in bringing about a symptom-free state. Furthermore, the bismuth by its chemotactic action undoubtedly aids cicatrization, as has been shown by the use of bismuth paste in the treatment of refractory sinuses.

After the eighth day a regular "ulcer cure" should be instituted. The ulcer patient has an ulcerous proclivity as a defect in his constitution. The only known way now to control that is by placing the body in as near a state of health as possible. Since nearly all perforating cases occur in individuals of poor resistance, the general condition must be raised in order to prevent possible reactivation or reperforation. The erethistic type, which is distinguished by the greater tendency to painful peristalsis and hyperacidity, should be thoroughly atropinized and kept that way

for many weeks when only suture with inclusion has been practiced, for the simple reason that the gastric muscle must be kept as quiet as possible in order not to delay cicatrization. In all cases where a persistently high hydrochloric acidity continues, atropin should also be used for its effect on the vagus in lessening acid secretion. In these latter cases, experience with much material indicates that there are also extrinsic causes for the continued hyperchlorhydria.

Continuous intensive alkalization of the stomach is still employed to a considerable extent, notwithstanding that Hardt and Rivers, in a study of 48 selected cases with peptic ulcer observed in the Mayo Clinic from April 1921 to April 1922, showed toxic manifestations following the alkaline treatment. Although these findings were not positive, they were nevertheless suggestive of the injury that might result from the persistent alkalosis resulting from such a method of therapy.

Recently, however, Westphal and Kuckuck have shown that alkalinization with sodium bicarbonate is a more serious affair than one would suppose. Considering how long the use of antacids has been in vogue, it is strange that the baneful local effects have not been disclosed before now. They noticed, as have many others, that instead of the usual hunger pain of ulcer, those who had been on large doses of bicarbonate of soda eventually returned complaining of a feeling of fulness and weight in the epigastrium and belching of gas. Fractional gastric tests showed an achylia which in some cases was histamin resistant. Furthermore, by the employment of Berg's method of interpretation of Roentgen topography of the gastric mucosa, the folds were found broadened and thickened to a decided degree. Histologic examination of specimens of the gastric mucosa removed at operation showed the usual structural changes of hypertrophic gastritis. Continued roentgenologic observations on cases exhibiting the broadened folds of mucous membrane were made after cessation of the intensive alkalization, and this method regularly showed a decided reduction in breadths of the folds. The induction of alkali-achylia is thereby proved to be a serious therapeutic blunder in that it

replaces an ulcer with what is regarded in some quarters as a precancerous disease. Exact observations have proved that the heavy alkalization is found to be followed by a correspondingly heavy response of the acid glands of the stomach and the continued stimulation of them eventually leads to functional or organic exhaustion of their secretory activity. It, of course, gives relief and therefore is popular. But is it justified in view of these observations?

Another fact, that all of you must have noticed who are in the habit of studying the clinical and therapeutic history of ulcer cases, is that patients recover on all sorts of dietary systems. Consider, for example, those used by Von Leube, Lenhartz, Sippy, Alvarez, Jarotsky, Smithies, etc. The more material one sees, the more the principles laid down more than 20 years ago by Hans Elsner appear to comprehend the philosophic reasons. They are in brief:

(1) Caloric values must be sufficient to properly nourish that particular individual.

(2) Daily volume should not be too large nor too small in order to avoid contractions from over distension on the one hand and from hunger on the other.

(3) Nutrient material must be nonirritating, both chemically and mechanically. Therefore, spices and roughage must be avoided.

(4) Articles comprising the diet should be such as to combine easily with the hydrochloric acid. Herein lies the advantage of the modified Lenhartz diet of milk, eggs and meat. So then, to my mind, the successful management of the diet of ulcer patients calls for careful individualization. For instance, in one case the only thing tolerated by a patient was the old fashioned "mandelmilch". Rectal feedings had failed entirely, and the stomach refused everything for 8 days excepting this "mandelmilch".

Recurrent postoperative ulcer is a stubborn problem very rebellious to surgery, the patient usually experiencing many revisions. Here we have found that 20 weeks' rest in bed with appropriate dietetic and medicinal measures is the only method offering real recovery to the sufferer; always providing, of course, that the operative mechanics have been properly done.

Indeed, the value of sufficient physical repose in rebellious cases seems to have attracted little interest. The usual period according to the histories of patients coming in with relapsing ulcer is one of 2 to 6 weeks. This amount of time suffices in the usual run of acute or superficial ulcerations, but is never sufficient in deep or relapsing cases. The induration around an old ulcer often requires at least 10 weeks for absorption before cicatrization commences. Anyone can verify this statement by observation of cases submitted to surgery. The reason is that the stomach is never at rest. It can not be splinted like a broken bone, but the respiratory excursions can be lessened and slowed, thus giving the lesion such an amount of rest that the local reparative powers can do their work. The warrant for this view is the same as with the heart, the lungs and other organs. Why not give the stomach the same opportunity? Besides, and this applies with especial emphasis to old and rebellious cases, not only does physical repose lessen the respiratory excursion of the diaphragm, thus giving the stomach more rest, but every one must have noticed that ulcer patients are of a peculiarly nervous type, characterized by nervous tension, and that atropinization is often unable to reduce the hyperchlorhydria. Providing that there are no extrinsic causes for the continued hypersecretion of acid these same cases will show a low acid curve after sufficient bodily rest. There is no need of heavy alkalization where sufficiently long physical rest is carried out. And when these things are explained to the patient together with the gravity of his lesion there is seldom serious objection to submission. All that has just been said applies with even more force to those troublesome cases that continue to have pylorospasm even after the best of surgery. A personal case had had 4 surgical revisions without the slightest relief, but was entirely relieved by a 20 weeks' rest cure. The same advice is necessary in those cases of posterior ulcer which invades the pancreas as well as in those more rare ones that cannot tolerate any form of alkaline treatment at all.

In conclusion, all ulcer patients, after surgical intervention and discharge, should be



given active clinical supervision, not only dietetically but otherwise as well for at least 1 year. Then, after a symptom-free state arrives, the patient must be impressed with the necessity of avoiding dietary and other indiscretions, of the need of sufficient sleep, and of the avoidance of unduly hard labor. In short, he must be reminded that he has an ulcer diathesis and that his future depends upon maintaining more than the average standard of health.

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## ACUTE PERFORATION OF PEPTIC ULCERS\*

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In the whole field of abdominal diseases there is no more sudden, dramatic or dangerous catastrophe than an acute perforation of a gastric or duodenal ulcer. By such an accident a patient, apparently in good health up to the moment of its occurrence, is felled as if by a bullet; and, unless prompt and efficient surgical intervention is instituted, his condition progresses rapidly from bad to worse until death almost invariably supervenes within a few days. Upon early recognition and immediate operation, the victim's life depends more than in all other abdominal emergencies, not excepting ruptured tubal pregnancy, acute pancreatitis, traumatic rupture of solid viscera or even gunshot wounds. In all of these, the percentage of recoveries without operation will be considerably higher than in the overlooked or neglected cases of acute perforation of a peptic ulcer, in which the mortality is almost exactly 100%.

It is therefore essential that, from time to time, the subject be reviewed in order that the general practitioner, as well as the surgeon, may constantly bear the condition in mind, and be familiar with those symptoms and signs which in the early hours, at least, make its recognition usually so easy.

*Classification.* Perforation of peptic ulcers

may be classified as: (a) Acute; (b) subacute; (c) chronic.

In the acute variety, with which the discussion this evening will be primarily concerned, the perforation occurs suddenly, completely and often without premonitory signs, the contents of the stomach or duodenum being discharged directly into the general peritoneal cavity, Morison's pouch, or the lesser peritoneal sac, depending upon the location of the ulcer.

In the subacute variety, perforation occurs almost if not quite as quickly; but, owing to the small size of the opening, the emptiness of the affected viscus and the fortunate disposition of the natural protective forces of the peritoneum, extensive leakage into the peritoneal cavity does not occur. In these instances, the surgeon finds the opening plugged with a tab of omentum or sealed with lymph, making a cover for the ulcer and preventing the extravasation of any considerable quantity of stomach contents.

In chronic perforation the ulcer slowly but progressively extends through all the visceral layers, allowing ample time for development of a plastic peritonitis at its base or for adhesion of the stomach or duodenum in the region of the ulcer to neighboring organs or to the anterior abdominal wall. The leakage is therefore slight and limited to a small area, but it may lead to the formation of a perigastric or subphrenic abscess.

As one might expect, the great majority (90%) of acute and subacute perforations are found on the anterior surface of the stomach or duodenum, while only a few (10%) occur into the lesser sac or retroperitoneal tissues. On the other hand, however, of chronic perforating ulcers, more than 75% involve the posterior wall and lesser curvature of the stomach.

*Etiology.* Perforation, either acute or chronic, is a natural event occurring at some time in the course of 5% to 28% of all cases of peptic ulcer, according to different statistical studies. Its etiology may briefly be said to be that of peptic ulceration in general, with, in addition, a greatly increased activity of the ulcerative process, due to unknown causes immediately preceding rupture, or to

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\* (Read as part of a symposium at the Academy of Medicine, Newark, October 28, 1930).

the strain of over-distension or sudden exertion upon a much weakened gastric or duodenal wall. The majority of cases are seen in males in the third to the fifth decades, but no age is immune.

*Symptoms.* The symptoms of acute perforation may be grouped under 4 heads: (a) Antecedent; (b) premonitory; (c) early; (d) late.

The antecedent symptoms are those of indigestion, of the ulcer type, often extending over a period of months or years. A carefully obtained history will rarely fail to disclose definite subjective evidence of the existence of an ulcer, especially when viewed in retrospect, but one does occasionally encounter a case which has been quite symptom-free up to the moment of perforation. Even then, however, upon being pressed, the patient will usually admit that he "may be troubled with a little gas now and then". Because of gravity of the patient's illness, questions bearing upon the antecedent history are often omitted. One cannot emphasize too strongly the necessity for care in this particular, for an *accurate* history will not infrequently make obvious an otherwise uncertain diagnosis.

Premonitory symptoms are often absent, but, when present, they have great significance. If a patient known to have peptic ulcer begins to suffer in the present attack much more than in the past, if the pain becomes more severe and less amenable to treatment, if localized tenderness appears or becomes more acute, then are the danger signals of impending perforation being flown and then should surgical treatment be undertaken to fore-stall approaching disaster.

In the early hours following perforation, the patient usually exhibits a striking attitude and appearance. He is most often found lying in a position of fixed immobility, complaining piteously of excruciating epigastric pain and resenting the touch of the examining hand upon the abdominal wall. The ashen pallor, beaded brow, anxious facies, rapid, shallow breathing and the prostration combine to give him the appearance of shock, but in one most important respect the picture is incomplete. The circulation shows little if

any change—the pulse remaining slow, volume full and blood pressure but little altered. The body temperature is usually normal or slightly below and, in common with the pulse rate, rises only with the onset of peritonitis. The abdominal muscles at once become inflexibly rigid producing in thin subjects a scaphoid abdomen.

With the lapse of a few hours the disease makes rapid progress. The pulse rate and temperature increase, muscular rigidity persists, the abdomen becomes much distended, vomiting occurs repeatedly, and the picture thereafter differs in no essential respect in its course and termination from that of acute generalized peritonitis from any other cause.

Pain is the one constant symptom of acute perforation. It is sudden in onset, excruciating in character and prostrating beyond expression in its effects. It is generalized throughout the abdomen, but it is often greater in the epigastrium, the right hypochondrium, or the right iliac fossa, depending upon the site of perforation or the point of maximum accumulation of extravasated fluid. It does not radiate and it is much aggravated by motion or by palpation of the abdominal wall. It is variously described by different patients, but all agree upon its agonizing intensity. It is said to rival in severity the pain of coronary thrombosis or that of acute pancreatitis, and at times its violence is so great as to cause sudden death.

Vomiting of stomach contents and, rarely, of blood, occurs as an initial symptom in a fair proportion of the cases, but it is not a prominent feature until after the onset of peritonitis. The shock so commonly spoken of is much more apparent than real. True shock connotes a grave change in the circulatory mechanism, which in the case of acute perforation in the early hours, is peculiarly conspicuous by its absence. Moynihan aptly describes the patient as "having the appearance of shock".

*Physical signs.* Rigidity of the abdominal muscles and tenderness upon palpation are the only physical signs always present. The rigidity affects all of the abdominal muscles including the diaphragm which, in conjunction with the distension of the stomach, causes the



rapid, shallow type of breathing usually noted. It is board-like in character and generalized throughout the abdominal wall, but often distinctly more marked in the region of the perforation or of the maximum accumulation of extravasated fluid. Muscular spasm of the same degree is not encountered in any other condition except sudden and complete perforation of other hollow viscera due either to ulceration or traumatism. It is remarkable how rapidly and completely the rigidity disappears following closure of the perforation.

Distribution of the tenderness follows closely that of the pain and rigidity, its point of maximum intensity often serving to locate the site of perforation with considerable accuracy.

Disappearance of liver dulness, when observed, is a sign of the greatest importance, indicating, as it does, the presence of gas in the peritoneal cavity. It is quite constantly noted in late cases, where it serves as one of the most valuable points in the differential diagnosis of the various forms of acute generalized peritonitis. In the early hours, however, this sign is so often absent that failure to elicit it should in no way influence one against the diagnosis of perforation. Elicitation of the sign requires great care. With the patient in a semi-sitting posture, percussion is made in the right midaxillary line instead of over the anterior surface of the liver which is so uniformly practiced, and which is so misleading in cases with marked tympanites. A roentgenogram, taken with the patient sitting up, will demonstrate a bubble between the liver and diaphragm when any considerable quantity of gas has accumulated in the peritoneal cavity. As positive evidence, this finding is invaluable; as negative, worthless, for many of the early cases will have but little if any leakage of gas. Incidentally, this procedure constitutes the only laboratory examination of any value in the diagnosis of perforation of peptic ulcers. It is not pathognomonic, however, for a collection of gas in the peritoneal cavity from any source will give the same picture. The method should be employed only as an aid in the diagnosis of doubtful cases as it involves loss of time and

additional handling of the already too sick patient.

It is impossible to overstress the condition of the circulation in the first hours following perforation. No other abdominal crisis leaves the pulse rate and blood pressure so little altered. The tranquility of the pulse with its full volume and the sustained blood pressure seem quite incompatible with the otherwise obvious gravity of the patient's condition. Failure to appreciate and remember this most vital fact has led to many disastrous errors in diagnosis and delays in operation. Only the recent writers, notably, Moynihan, Finney and Babcock lay sufficient emphasis on the point. All the older text-books mention a rapid and feeble pulse as an early sign of perforation, and the error is perpetuated in an article by one of America's leading surgeons in a work on "Surgical Diagnosis" published within a few months. One must remember that increase in the pulse rate and elevation of the body temperature occur only with the onset of peritonitis.

*Diagnosis.* The typical early case of acute perforation of a peptic ulcer presents no difficulty in diagnosis to one who has seen the condition once or twice before. The antecedent history of indigestion, sudden onset with violent pain and prostration, appearance of shock with unaltered circulation and the board-like rigidity of the abdominal muscles make a clinical picture difficult to confuse with any other abdominal emergency. It is worthy of note that the junior intern on duty in the receiving ward of the City Hospital rarely fails to make the correct diagnosis in this type of case. Only in the presence of coexisting acute alcoholic intoxication is the diagnosis apt to be difficult. In such cases it may be quite impossible to arrive at a correct conclusion without an exploratory incision. Should the doubt arise, one must not hesitate to operate at once, for an unnecessary operation will do little harm, while a delayed one may easily result in disaster.

*Differential diagnosis.* Although the typical early case of acute perforation is easy of recognition, there are many less obvious examples which require differentiation from other emergencies, thoracic as well as ab-

dominal. Perforation has been mistaken for everything ranging from renal colic to sunstroke, but as a rule, distinction need be made between only a relatively few conditions. One most often must distinguish between perforation and acute appendicitis, and the task is not always easy. The question arises usually as the result of perforation of a duodenal ulcer, the extravasated fluid from which first fills Morison's pouch, then runs down on the outer side of the ascending colon, and finally accumulates in some quantity in the pelvis and right iliac fossa where it may produce exquisite pain with locally increased tenderness and muscular rigidity. The mimicry of acute appendicitis may be complete except for presence of the generalized board-like rigidity and the appearance of shock with unchanged circulation and body temperature. The antecedent history, story of the onset, presence or absence of rigidity of the muscles of the left upper quadrant and possibly the disappearance of liver dullness, will usually suffice to settle the problem.

Biliary colic with or without acute cholecystitis may give rise to the suspicion of perforation, but here the sex, age and stature of the patient, the history of previous similar attacks, character and radiation of the pain, ceaseless motion in the search for relief and absence of the appearance of shock and of the generalized muscular rigidity, should serve to make the differentiation clear.

The onset of acute pancreatitis is often quite as spectacular as that of acute perforation, but, again, the age of the patient, antecedent history of biliary disease, very rapid, feeble pulse, uncontrollable vomiting and early development of an epigastric mass, together with the less generalized and less inflexible muscle spasm, will be helpful in distinguishing between the conditions.

Acute intestinal obstruction affecting the small intestine occasionally simulates an acute perforation; but the intermittent colicky type of pain, prompt vomiting of stomach followed by intestinal contents, and absence of generalized rigidity of the abdominal muscles should clarify the diagnosis.

In each of the other abdominal emergen-

cies, such as acute salpingitis, rupture of a tubal pregnancy, rupture or twist in the pedicle of an ovarian cyst, intussusception, acute gastro-enteritis, strangulated hernia and renal colic, the syndrome is so characteristic that the differential points distinguishing these from an acute perforation should suggest themselves without special elaboration.

Of thoracic conditions, only 2 are apt to be confused with an acute perforation: Lobar pneumonia, affecting the right lower lobe and causing a diaphragmatic pleurisy, sometimes produces severe epigastric pain and rigidity of the muscles of the right upper quadrant of the abdomen. In such instances, however, the chill, high fever, rapid pulse and respiratory rates, and perhaps a pleural friction rub, should enable one to rule out the question of perforation.

An occasional case of coronary thrombosis in which the pain is referred to the epigastrium instead of following its usual distribution, may bear a strong superficial resemblance to an acute perforation of peptic ulcer, but absence of the characteristic rigidity of the abdominal muscles together with the disorganized heart action, low blood pressure, and early appearance of a pericardial friction sound should enable one to recognize the true state of affairs.

One other pitfall requires mention in passing. A gastric crisis of tabes dorsalis has more than once resulted in operation for a perforation which did not exist. One need only remember the possibility of the existence of such a condition to be able to exclude it by an examination of the pupils and the knee-jerks. Incidentally, these steps should be part of the routine in the diagnosis of all surgical conditions within the abdomen. The rare instance of a perforation of an ulcer occurring in a sufferer from locomotor ataxia cannot be differentiated from a gastric crisis without operation, unless one is fortunate enough to observe the disappearance of liver dullness or to find a gas bubble in the roentgenogram.

The late cases of acute perforation of peptic ulcers may present insuperable diagnostic difficulties. Often the most one can say is that a generalized peritonitis of unknown ori-



gin exists. It is here that the close scrutiny of a carefully obtained history may furnish a clue to solution of the problem. At this stage there are no manifestations upon which much reliance may be placed. Perhaps the most constant and trustworthy sign is the presence of gas, free in the peritoneal cavity, as shown by disappearance of liver dulness or by demonstration in a roentgenogram of a gas bubble between the liver and diaphragm. Even such evidence is inconclusive, however, for it merely proves the existence of a perforation somewhere in the alimentary tract—a perforated peptic or typhoid ulcer, leaking cecum, perforated sigmoid diverticulum or, perhaps, even a gas bacillus infection within the peritoneal cavity. In such a situation the surgeon is justified in making a small suprapubic incision. The character of the escaping fluid will then enable him to locate the perforation, to which he may gain access through a second incision appropriately placed, the first being used for drainage purposes if desired.

*Prognosis.* The prognosis in an acute perforation of a peptic ulcer depends largely upon promptness of the diagnosis and the speed and skill with which operative treatment is rendered. It is an emergency of the first magnitude, admitting of nothing but the least possible delay. When feasible, the patient should be taken directly from the ambulance to the operating room to save time and unnecessary handling. Patients operated upon within the first 6 hours will nearly all recover, but after that time the death rate rises about 3% per hour until at the thirty-sixth hour it reaches practically 100%. Here, if anywhere, may the mortality be said to be that of delay. The tyro in surgery may successfully close a perforation in the early hours—the most skilful will be powerless to stay progress of the advanced case.

No cloud is without its silver lining, and an acute perforation of a peptic ulcer may prove to be a blessing in disguise, for it seems to be an established clinical fact that a large number of the fortunate survivors gain permanent relief from their ulcer symptoms following their return from the Valley of the Shadow.

#### SUPPLEMENTAL NOTE

Dr. Herbert A. Schulte and Dr. Robert H. Hill have analyzed with meticulous care the statistics of cases of acute perforation of peptic ulcers treated in the Newark City Hospital in the period beginning January 1, 1920, and ending December 31, 1929. During this time 168 patients were observed, the diagnosis in each instance being verified by operation or autopsy. Of this number, 62 (37%) died. The majority of the recorded previous histories mention one or more symptoms indicative of ulcer, such as epigastric pain or distress. There are many examples of the unaltered pulse rate and body temperature in the early hours following perforation.

A correct preoperative diagnosis was made in 120 cases, while in 27 instances the condition was confused with acute appendicitis. Perforation of an ulcer was mistaken for acute cholecystitis and acute intestinal obstruction, each 4 times; acute pancreatitis, 3 times; renal colic and heart disease, each twice; ruptured ectopic pregnancy, tuberculous peritonitis, cancer of the stomach, influenza, lead colic and constipation each once. There is ample and convincing evidence of the need for early operative treatment and, after carefully reviewing all of the available data on the fatal cases, one is reluctantly led to the conclusion that earlier operation, greater gentleness and speed, more thorough exploration and better closure of the perforation would have saved a definite number of those who succumbed.

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#### TREATMENT OF PERFORATED PEPTIC ULCER\*

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HERBERT A. SCHULTE, A.B., M.D., F.A.C.S.,  
Newark, New Jersey

In considering the treatment of this condition we shall hold to the classification of perforation as given by Dr. Schaaf, i.e. acute, subacute, and chronic.

Acute and subacute perforations are treated identically and we will discuss these first. The

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\* (Read as part of the symposium at the Newark Academy of Medicine, Oct. 28, 1930.)

treatment is *surgery*, which might be written in large letters, with *emergency* emphasized in even larger letters. There are few problems which the surgeon has to face that demand emergency measures more than perforation of a peptic ulcer, and few conditions in which delay of a few hours may make such a difference in the result. I should like to repeat the statement made by Dr. Schaaf that "the mortality rate rises about 3% with every hour's delay after 6 hours", therefore, it is a distinct blot on the records of my surgical service to delay operation any later than is absolutely essential to make provisional diagnosis and preparation for the surgical procedure. These patients are always seriously ill and great care should be taken in transportation to and in the hospital. It would be more ideal to have them enter the hospital directly to the shock room connected with the operating suite.

There can be no doubt that recovery by medical treatment alone is possible in certain forms of perforated ulcers for there are cases on record of undoubted perforation where surgery was not immediately available, but where later operation proved the point. So, patients may recover but their recovery cannot be urged as a reason for the delay or withholding of surgical help in all cases, for the possibility of spontaneous recovery, though not denied, is yet so remote as to make it imperative to adopt operative treatment at the earliest possible moment. Attention to the lesser details in guarding the patient against greater shock during the operation is exceedingly important and maintenance of proper temperature of the table and room, avoidance of delay in the operating room, posture of patient during operation, and a carefully chosen and administered anesthetic may play important parts in the ultimate results.

The upper abdomen is usually opened to the right of the midline by an *ample incision*. It has been suggested that because perforations of longer duration frequently create diagnoses, especially of appendicitis, that in these cases a small suprapubic midline incision be made. Gas and the type of fluid encountered would be helpful in more accurately locating the lesion. The upper incision could

then be made and the suprapubic incision used for drainage purposes. On opening the peritoneum one encounters gas and fluid which is a mixture of stomach contents containing semidigested food particles and the secretion poured out by the peritoneum as a protective measure, and is not only sterile but actively antibacterial. The ulcer is not always readily found, but it is recognized by the escape of gas and fluid and by a thick deposit of lymph around it. If the perforation does not readily present itself, a search should be made in the region where it most frequently occurs, namely, in the neighborhood of the pylorus and along the lesser curvature. Remember, that about 90% are on the more easily accessible anterior surface of stomach and duodenum. It has been stated previously that in about 10% of cases the site of perforation is not readily found because the ulcer is situated on the posterior wall and in these cases it is necessary to open the lesser peritoneal cavity and continue search of the posterior wall of the stomach. An ulcer of the posterior duodenal wall will sometimes rupture into the retroperitoneal tissues and produce an edema of the area, which serves as an excellent guide in the search.

As soon as the ulcer is localized, the involved part is drawn, if possible, well up into the wound, and precaution should be taken against further soiling of the peritoneum. One must not neglect a careful search for other ulcers, for there have been cases reported of simultaneous or almost simultaneous rupture of 2 ulcers. The surgeon is then presented with the problem of procedure, and it should be emphasized here that every case is a law unto itself and the problem is to apply to this particular case that particular form of operative procedure which in his judgment is most suitable to the condition. It is bad practice and worse surgery to attempt to adapt any one course to every case. One must be guided by the location of the ulcer, size of the area involved, degree of chronicity and effect of any procedure on the future function of the organ; always remembering that the operation is an emergency procedure, and the patient a relatively poor risk. Therefore, depending on the factors involved, the ulcer may be cauter-



ized or excised before proceeding with repairs.

There seems to be good evidence that an ulcer which perforates and heals does not recur. If this is true in all cases, then treatment by cautery or excision is a useless procedure and time misspent.

For simple closure of the perforation, a single stitch through all coats will suffice, or a mattress suture, which is of particular value where edematous tissue is encountered. The site is then buried by infolding the stomach or duodenal walls with double layers of continuous sutures. To make the sealing-off complete, an omental flap is of great value.

Many surgeons recommend turning up the great omentum to lie between the anterior stomach surface and the parietal peritoneum. If the stomach is full, as it frequently is, it is wise to pass a stomach tube and empty it of contents. A gentle lavage may also be performed. Some authorities, Deaver for instance, insist upon closure of the perforation followed by gastro-enterostomy, as a *routine procedure*, while others, headed by Moynihan, practice this only when the exigencies of the case demand it. Let me quote Moynihan on this point:

"The question of the performance of gastro-enterostomy has excited great controversy. The factors which require consideration are many, and they refer not only to the various attributes of the ulcer in respect to position, size and lapse of time since perforation, nor to the degree of peritoneal contamination, but also and perhaps chiefly to the experience, the judgment and the technical skill of the surgeon. Statistics which have been furnished in large numbers do not help in the solution of the problem."

Certain definite indications of procedure can however be given. If the suture of an ulcer lying in the stomach or the duodenum has caused a definite obstruction, then gastro-enterostomy will certainly be necessary or at least extremely desirable. If obstruction seems inevitable in the future because of the contraction of a scar, or if there are other ulcers present, a short-circuiting operation must be considered. A gastro-enterostomy performed in a case of recent perforation does not add appreciably to the danger of operation, but the mortality increases steadily in cases operated on after 12 hours. The con-

dition of the patient in the late hours—24 to 36 hours after perforation—is such that the thought of prolonging the operation even for a few minutes must be rejected.

Deaver has recorded a mortality rate of only 6.8% in a series where gastro-enterostomy was performed after infolding the ulcer.

For ulcers situated in the duodenum or stomach near the pylorus, the pyloroplasty as modified by Finney, with excision of the ulcer, seems ideal for it has the added advantage of not exposing other areas to contamination.

Differences of opinion are to be found among surgeons of experience with reference to the *toilet* of the peritoneum. Authority can be found for almost any method that one may employ. It is a serious question whether or not more harm than good may be done by attempting more than the removal of gross food particles and other material readily accessible. Here, again, the element of elapsed time enters. If more than 12 hours have elapsed since perforation and if gross food particles are free in the peritoneum, greater care and longer time must be spent in ensuring that all is clean. Moynihan recommends hot moist sponges passed into all parts of the abdomen, with especial care to the subdiaphragmatic areas, for the risk of subphrenic abscess or spreading of a septic inflammation through the diaphragm, giving rise to a pleurisy or empyema, is by no means inconsiderable. Finney and others suggest flushing the peritoneal cavity with hot sterile saline through multiple incisions to be used for drainage. But this procedure should be reserved for the severe cases of longer duration.

The question of drainage is a debatable one. Some authorities advise drainage as a routine practice, others oppose it. After all, the question of drainage can be decided only by the surgeon himself in each case. The time elapsed since perforation and the type of peritoneal fluid must be the guides. It is stated that if less than 12 hours have elapsed, drainage is seldom necessary. After 12 hours, it is probably necessary to drain at least one-half of the cases. If one drains at all, it is a good rule to drain thoroughly. This means multiple drains placed in dependent portions

as indicated and brought out through stab wounds in the flanks and above the pubis, or even through the vagina in the case of women. Drainage through the incision is to be avoided if possible. Rolled rubber drains in pairs are preferable, split rubber tubing is often employed, but gauze is not advisable because of its tendency to act as a plug. *Early removal of drains is to be encouraged.*

The most dreaded complication during the postoperative course of a perforated ulcer is formation of a subphrenic abscess or extension of a septic process into the chest as an empyema. These conditions must be recognized promptly and dealt with accordingly.

The treatment of chronic perforation is also definitely surgical, but the great need for hasty intervention is not so imperative. In these cases we find that there has been a limited area of peritoneal involvement, usually fixing the ulcer to an adjacent organ, or a well limited perigastric abscess has formed. The same general principle governing the surgical procedure can be used here as in the acute varieties, but the type of operation employed will be the same as for any chronic ulcer uncomplicated by perforation.

In reviewing the cases of perforated peptic ulcers admitted to the Newark City Hospital for the 10 years 1920-9, we have accumulated a lot of statistics which are of doubtful value, and if presented here I am sure would be a bore. There are, however, some figures which I feel might be of some interest to you.

There were 106 patients who recovered, operated upon by 24 surgeons; 74 were operated upon within 12 hours after perforation; 15 within 12 to 24 hours; 3 within 24 to 48 hours, and 14 within 48 hours to 14 days. In 2 surgical cases no perforation was found, but all evidence suggested a ruptured ulcer. In 72 cases, the surgeon infolded the ulcer; 7 ulcers were cauterized and 8 excised; 13 posterior gastro-enterostomies were

performed. In 10 cases the appendix was also removed. Only 5 cases were *not drained*; these made uncomplicated recoveries, the average stay in the hospital being 19 days. In 19 cases stab wounds were used for drainage, and 3 of these developed the postoperative complications of subphrenic abscess. If these 3 patients whose hospital stay ran up to 73 days, be excluded, we found an average convalescence time of 20 days. Of 72 cases drained through the wound either alone or with stab wounds, 4 were complicated by subphrenic abscesses. The average hospital stay was  $25\frac{1}{4}$  days. There were 62 deaths; 58 were operated on, and 4 who were moribund on admission, and the diagnosis was made at autopsy. In analyzing 58 deaths we found that there were 6 cases in which no perforation was found at operation but which were definitely diagnosed "ruptured peptic ulcer" by autopsy or operative findings. In 3 cases the ulcers were cauterized; in 3 excised; no gastro-enterostomies were performed; 4 added removal of the appendix and in 1 case jejunostomy was done. These patients lived from 1 to 36 days, an average of  $5\frac{3}{4}$  days.

The causes of deaths were: peritonitis, 46; peritonitis and evisceration, 2; peritonitis and diabetes, 2; peritonitis and hemorrhage, 1; subphrenic abscess, 2; postoperative pneumonia, 6; and 7 had some cardiac complication.

It is interesting to note that of the 58 deaths 16 were patients who had been operated on within 12 hours. The causes of death in these cases: peritonitis, 6; peritonitis with no closure of ulcer, 2; hemorrhage, 1; pneumonia, 3; cardiac, 4.

There were 12 deaths in cases operated on 12 to 24 hours after perforation; 12 cases, 24 to 48 hours, and 23 were operated upon after 48 hours.

I wish to express my appreciation to Dr. Robert Hill for his help in going over the City Hospital records.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if:

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## THE PASSING WESTWARD OF OSMUN AND LAWRENCE

That small group of officials comprising the Secretaries and Reporters of County Medical Societies mourns the recent loss of two members whose departure creates vacancies difficult to fill. Lawrence, as a Reporter, exemplified the adage that it is the busy man who finds time always to perform the extra task demanded; he rarely failed to report promptly the proceedings of his county society. Osmun, as a Secretary, was in like manner, a prompt, reliable and efficient worker in the interests of his profession; and it was partly in recognition of his faithful attendance upon meetings that he was last year promoted to the office of Trustee in the State Society.

The officers of the state organization and the Editor of the Journal will miss Lawrence and Osmun as keenly, perhaps, as will their associates in Ocean and Warren Counties.

## ADVANCE NOTICE OF ANNUAL MEETING

Owing to the near approach of the 165th Annual Meeting of the Medical Society of New Jersey, this issue of the Journal is limited somewhat in size and devoted in part to publication of the Preessional Reports and the Preliminary Program. In as much as the Journal material must go to the printer by the middle of April for appearance in the

May issue (made necessary by changing the meeting date to the first week in June), and the fiscal year of the Society does not end until June first, it is difficult if not impossible for some officials and committee chairmen to prepare a satisfactory preessional report; i.e. satisfactory to those who are doing the work. For that reason, and because it would have seriously damaged her schedule, we take the responsibility for having excused the Field Secretary from submitting such a report this year, and trust you will be satisfied with the Executive Secretary's assurance that her report in June will show an excellent record of performance and accomplishment. Our own report cannot be a complete one but will cover most of the important items. The Treasurer will probably have to resort to a leaflet for distribution at the opening session. The Welfare Committee Chairman supplies his report, as the committee's work is probably terminated for the year; and we shall include herewith as many other committee reports as may be received.

Monmouth County members are doing all they can to make things attractive, even sponsoring an "All Day Handicap Golf Tournament" for Wednesday, June 3, at the Asbury Park Golf Club, to which men and women, both, are invited. There will be prizes for "low gross, and low net, 18 hole scores; and special prizes for winners and runners-up in a Scotch 4 ball four-some for men.

Do not overlook the fact that the Woman's

Auxiliary is meeting at the same time and that provision has been made for social entertainment in which all may participate.

Come out and help make this Annual Meeting an exceptional success. Make your hotel reservations "right now".

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## COUNTY SOCIETY AND HOSPITAL REPORTS; WE PLAY NO FAVORITES

On a number of different occasions the Editor has expressed the belief that much of the material published by this Journal in its Section, or Department, of County Society Reports is of as great value to our readers, scientifically, as the more carefully prepared material presented through the channel of Original Articles. That is notably true of the Atlantic City, Bayonne, Elizabeth General, Jersey City and North Hudson hospital staff reports, and the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey. Our county society reports are fundamentally for the purpose of recording the transactions of such bodies, as component parts of the organized profession, giving incidentally abstracts of scientific papers read, and of the discussions that follow, at their meetings. It is in hospital staff meetings that most clinical reports and discussions are now presented, and such reviews of hospital work, including comparison of autopsy investigations with clinical records, furnish the best kind of material for post-graduate study.

Conceiving it to be one of the functions of this Journal to record the professional work, especially the clinical performances and scientific achievements of the physicians of New Jersey, we have constantly urged county society reporters regularly to furnish us with complete reports of all happenings at their sessions and, whenever they considered any paper on the program of sufficient merit to justify its wider dissemination, to procure it for publication in the Journal in full; and if that could not be done, then to submit to us an abstract of the paper. In like manner we have repeatedly invited other local societies

and all hospitals to send us reports of proceedings. A glance at the last page of the index to last year's Journal will show to what extent the invitation has been accepted.

Now, on several occasions, we have heard that some member or group of members of the state society felt aggrieved that his or their city or county had been receiving less space in the Journal than some other localities. The Editor desires to dispose of such grievance by stating *most emphatically* that *no partiality whatsoever* has ever been dispensed from this office. The reason why the societies and institutions of Atlantic, Hudson and Union Counties, and the one section of the Academy, have filled so much space is that they have alert and competent reporters. The Editor does not "write up" those reports; he does curtail some of them editorially. And he wishes to add the following message to all whom it may concern:

If the proceedings of your county society, or the doings of your hospital, are not receiving an appropriate amount of space in the Journal, *the fault lies in your own organization*. Send us as good reports as do the mentioned institutions and you will be accorded the same amount of space. *We play no favorites*.

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## STATUS OF STATE MEDICINE

The concluding letter of the series in which we have reviewed so-called state medicine—legally called national health insurance—appears in our travel talk this month. We have endeavored to collect for you reliable information concerning the laws and the working of such laws in other countries and to suggest the advisability of giving serious thought to the problems involved, so that we may not be caught unprepared if some radical legislation appears, and that we may more intelligently strive toward a solution of those unsatisfactory conditions that possibly give rise to discontent and to threats of governmental control. May we now recommend that you read carefully and ponder seriously upon the 3 special articles appearing consecutively in the March, April and May Journals.



## Special Article

### MEDICAL TRAVEL TALK

#### The Editor Returns from Vacation

Henry O. Reik, M.D.,  
Atlantic City

(Continued from April Journal)

Through the months of January to April, both inclusive, we have written of observations made while vacationing last summer, making use of such travel talk as a medium for conveyance of picked-up information relating to the operation of *state medicine* in Great Britain and France. Returning to the editorial desk on the first of October, and looking over accumulated journals, we were amazed to find that during the previous 6 months not less than 40 articles dealing with one or another aspect of state medicine had been published in American Journals issued by State Medical Societies; many of those articles being in the form of a State or County Presidential Address. We knew that the topic was a *live* one but had not realized that quite so much concerning it had been written. At first glance it appeared to have become really a *burning issue*, but that was an unjustified inference. Further investigation has led us to believe that the apparently widespread interest in this topic is limited to—at least the articles mostly emanated from—officers of medical societies and that small group of physicians that may be called “leaders” of medical opinion.

It is very difficult, indeed, to ascertain to what extent the profession at large is interested, but we can safely say that practically every physician holding an organizational official position that carries any degree of responsibility, and every physician in the organization's ranks who has given serious thought to the situation, is deeply concerned about changes that have been effected or that seem to be impending. Probably the condition is similar to that which confronts us with regard to governmental affairs. In political matters—city, state or national—we find only a few leaders or statesmen earnestly and intelligently striving to solve problems of state; a larger number, but still all too few, that are awake to the importance of some of those problems; and a vast congregation that remains utterly indifferent. If we may from our necessarily limited personal observation draw similar inferences bearing upon this point, we feel that a comparatively small percentage of American physicians are at pres-

ent reasonably well informed regarding the economic changes that have been and are taking place in the practice of medicine; that a larger percentage—fortunately a rapidly increasing number—is showing some interest in the situation and beginning to study these problems; but that considerably more than 50% of active members of the profession exhibits only indifference. Whatever befalls the profession will affect all of its members, and what we fear is that indifference on the part of the majority may result in something disastrous to the whole number.

That feeling explains our decision to extend these travel talks to cover state medicine reports from some other countries, so that in the light of knowledge as to what has happened elsewhere we may become better prepared to deal with our own troubles.

So, having reviewed conditions in England and France let us collect what information is available from other sources; we wish it were possible to accompany such data with an entertaining round-the-world travelogue, but at present can only supply material gathered from various publications.

It would be natural to commence with a consideration of state medicine in Germany because that was the first nation to adopt compulsory insurance against sickness; back in 1883. Unfortunately, at the present moment conditions in Germany are so topsy-turvy that outsiders cannot with any degree of accuracy estimate the situation. Prior to the World War we were given to believe in a general way that the socialistic medical laws in Germany were highly developed and in the main satisfactory to physicians and the people alike. Since the war we have heard much grumbling and neither the people nor the profession seems satisfied. Some of the discontent may be attributable to the changed state of affairs growing out of the governmental revolution; some may arise from the post-war period of bankruptcy and the slow recovery that is taking place in all professions and general business throughout Germany; but a large part of the trouble may be due to faults inherent to the original plan, that have been made worse by recent developments.

If we correctly understand it, the German system has always been defective in some important respects; for instance, that health insurance practice was not open to all qualified physicians, and, that control of such practice did not rest with a medical body but with lay officials. At any rate, we are not able at this moment to give out authentic information concerning the working of state medicine in that country, and it is appropriate to add here that our state of knowledge is little or no better

concerning Austria, Hungary, Bulgaria and other countries embraced in the broad term of "Middle Europe".

Belgium was last year passing through the same agony that France had previously endured, in broadening the scope of compulsory health insurance and the organized medical profession (Fédération médicale Belge) was fighting the radical provisions of a law then pending in the Senate, and was demanding amendments that would, in effect, produce a law comparable in the main to the one proposed by the British Medical Association. The last information we had relating thereto was that the original Bill had been withdrawn and a new one—granting the requested amendments—introduced.

Holland, which, like all other European countries, has long had voluntary health insurance, passed in 1930 into the group of 24 nations that provide for compulsory insurance of employees or wage earners of limited income (\$720 for single and \$1080 for married persons). We usually give the Dutch credit with exercising a deal of "common sense", and it is noteworthy that under the Netherlands law physicians have *themselves* organized "Association Funds" (their name for the health insurance companies), and thus control the situation so well that any member of the national medical association is eligible to treat such insured persons, and all shall be paid regulation fees for such services.

Among the Scandinavian countries, Denmark is reputed to have the most satisfactory scheme of insurance against sickness—a scheme which links health insurance with other "necessities of life", especially provision for invalidism and old age pensions, and which requires "repayment of all expenses incurred by public assistance, if in the future the individual can".

Russia comes to mind now whenever one thinks of any state social problem; and concern for the people's health is no exception to that rule. In the April Journal, page 361, we reviewed Chamberlin's book on Soviet Russia, in so far as the author referred to the practice of medicine. Of much greater value to us, as physicians, is a small book—*Health Work in Soviet Russia*—published among the Vanguard Studies of Soviet Russia (price 50 cents), edited by Jerome Davis of Yale University. The book was written by Anna J. Haines, a trained nurse, graduated from the Philadelphia General Hospital, who has spent a great deal of time in Russia since 1917 doing relief work, and establishing a Nurse's Training School in Moscow, under the auspices of the American Friends Service Committee.

Miss Haines' work should be doubly inter-

esting to us because she is a product of New Jersey; having been born in Moorestown and lived a goodly portion of her life in this state. We recommend as strongly as possible that you purchase and read Miss Haines' book; it is worth many times the small investment required. Here, of course, we can only provide you with selected portions to indicate what is happening to medical practice in Russia.

In the first place, both these authors, Chamberlin and Haines, agree in opinion that Lenin was fortunate in the selection of Dr. Semashko for Commissar of Health, and that Stalin has been wise in keeping that officer in charge of all health affairs. It appears also that the Commissariat of Health has made greater substantial success than any other department of the Soviet régime.

Nikolai Alexandrovich Semashko was a plain, country boy, born in the Orlov district and educated through his youthful period in the nearby schools. Country life under primitive conditions and among the peasants developed his rugged health and strength and his understanding of and sympathy for suffering humanity. Country origin probably accounts also for his characteristics of self-reliance and practical ability to deal with emergencies. Before his schooling was finished, the death of his father compelled the boy to procure his university education by his own efforts. His independent spirit got him into trouble with "the authorities" during his student days in Moscow, although he was never a populist nor violently radical, and he seems rather to have been forced into socialism by a chain of circumstances. Banished from Moscow for a time, he completed his medical studies at Kazan University, where he met Rykov, later to become the Soviet Prime Minister, and at Geneva, where he met Lenin. When the revolution occurred he returned to Moscow, from a country practice somewhere in the Balkans, and was chosen to serve as Director of the City Health Department. His reorganization of what constituted "a jumble of private hospitals without funds, a few wretchedly equipped public hospitals and a dwindling staff of disgusted doctors and nurses" attracted Lenin's attention and when the Soviet government moved to Petrograd he was asked by Lenin to draft a public health scheme on a nation-wide scale. His present official position, as Commissar of Health, corresponds to that of a member of the President's Cabinet—what would be called at Washington "Secretary of Health" if we had such a cabinet post; to that extent, at least, Russia is more advanced than the United States.

Miss Haines gives us a detailed description,



with explanatory diagrams, of the health department organization, of the present state of medical education, including the full curriculum for medical schools and nurses' training schools, and points out many difficulties yet to be conquered in the vast scheme outlined. Evidently much has been done but much remains to be done, and as in all other divisions of the new Russian government it remains to be seen whether the idealism of Soviet leaders can be transmuted into successful practical realism.

The Commissariat of Health controls everything and everybody associated with the prevention or cure of disease, acting largely through or in coöperation with the All-Russian Medical Workers' Union, whose membership embraces medical personnel from the august super-specialist to the lowly hospital-ward scrub woman. The following sentence quoted from the historic sketch of this movement has a familiar sound; i.e., "Of all the groups of medical workers, the doctors were the slowest to see the advantage in an association which would include them on the same footing with other workers for the people's health." The Russian Medical Association fought *state medicine* in general and resisted all overtures for affiliation made by the Medical Workers' Union from 1917 to 1920, at which time it was forced by legal procedure to surrender; securing, however, by way of compromise, the privilege of retaining its own organization for scientific purposes.

Now, a few words as to the aim of sovietized medicine and the accomplishments so far recorded. Semashko published in 1926 an essay on the Foundations of Soviet Medicine, in which he declared: "Soviet Government is a government by the masses in the cities and the country. This fundamental fact determines the entire character of soviet sanitation and medicine. The health of the workers is the responsibility of the workers themselves. The nationalization of medicine does not mean, as some think, the closing of all private hospitals and prevention of all private practice, but the actual *socialization* of medicine; the taking over by the state of the responsibility of providing for everyone, at his earliest need, free and well-qualified medical treatment. Only then will disappear, like a shadow before sunlight, all private hospitals and all *commercial* private practice. This is the perspective of communist medicine."

The goal is to be achieved by application of 5 basic principles:

- (1) The unification of medicine.
- (2) Accessibility of medical aid to all citizens.

(3) Medical treatment by qualified persons.

(4) Free medical treatment for all citizens.

(5) Emphasis on preventive medicine.

That does not appear to be a very terrifying program; indeed, with the exception of item No. 4, it sounds not unlike an American State Medical Society Welfare Program. One other significant variation is found in an accompanying explanation that: "The present-day Russian considers physical health as important a factor in life as education. Therefore, medical service has been put in the same category as the public school system, the state aiming to provide both for practically all citizens."

Among the results so far attained we note some interesting features:

(1) Limiting the working day of physicians to 6 hours, and the opportunity afforded them to carry on research work or any avocation they please during their ample leisure time.

(2) Free diet kitchens to which the physician may send patients who require scientifically prepared food, just as they are sent with other prescriptions to the pharmacy for medicine to be furnished freely.

(3) The formal school life of children begins with the kindergarten, to which applicants are admitted after the age of 3 years. The majority of children enter public schools at the age of 7, and upon entrance they are given a thorough physical examination by physicians trained for and assigned especially to this work. Then, these school physicians are expected to treat, or send to specialists, all children exhibiting defects that can be remedied; so that there is prompt correction of all faults that might handicap the child, and there is no wasted energy or loss of time such as attends our own school inspections.

(4) Health and sanitation are taught objectively in the schools and the children learn to assume responsibility for personal and public health.

(5) Special schools or classes are being provided as rapidly as funds become available for education and care of mental defectives or those whose poor vision or hearing prevents them traveling along the standard education route.

(6) Campaigns against venereal diseases and tuberculosis are well organized and every facility for treatment is offered the victims of those diseases. Special "night sanatoriums" have been opened for the reception and care of persons with incipient tuberculosis who must, nevertheless, work during the day; this is an innovation which is said to be producing surprisingly good results.

(7) The Insurance Fund pays full salary to women for the 6 to 8 weeks of absence from work before and after child-birth.

(8) An allowance in place of salary is awarded to any worker during a protracted illness, but this does not encourage malingering because it is limited to about 20% of his regular salary.

(9) Since the physicians have accepted the "new order of things" formerly famous specialists have gradually been restored to their old university and institutional positions, regardless of their political beliefs; Pavlov, for instance, is chief of the Institute for Preventive Medicine, and Speransky directs the Institute for Protection of Motherhood and Infancy.

(10) Incidentally, and surprisingly, distinct propaganda for specialization is being carried on among young physicians, urging them to continue their studies and investigations along special lines, and offering assistance in post-graduate work; a striking contrast to most of the talk in this part of the world, and another interesting experiment to watch. It would certainly be an ironic result if higher specialization should prove to be the solution of our troubles arising from the increase in number of specialists.

In her concluding remarks about sovietized medical practice, Miss Haines says:

"Russia's nationalized health system offers one method of solution, neither more revolutionary nor more expensive than our public school system. We may not care to adopt this solution but it can do us no harm to watch it."

Coming now to the Western Hemisphere we find Chile the only South American country so far listed as having adopted compulsory health insurance—and of that law we regret to say we know nothing—though Brazil and the Argentine Confederation are considering the matter, and Canada, in North America, is on the verge of accepting state medicine.

In 1928 the Canadian national government was asked to adopt some form of health insurance, and with that request was linked the question of insurance to cover unemployment. More attention was paid at the time to the subject of employment, and then the Department of Justice ruled that control of health, like education, belonged to the provinces—not the nation; a decision of importance to us because, by comparison, we believe in the United States that control of health matters and the practice of medicine is a "state's right" problem. In consequence of that ruling, the matter of health insurance was referred to the several provinces, and during the past 3 years extensive and intensive study of *state medicine* has been made by the pro-

vincial legislatures of Alberta, British Columbia, Ontario and Saskatchewan. Through the courtesy of Dr. W. Harvey Smith, President of the Canadian Medical Society, we have had the privilege of reading the records of the preliminary investigation by a Royal Commission of the Canadian House of Commons, and reports of the studies made in Alberta and British Columbia; all very instructive documents.

It looks now as if the greater part of Canada will adopt a plan of health insurance similar to that of Great Britain in the immediate future. President Smith has advised the profession to recognize its responsibilities and to devise plans for placing medical service on a par with medical science, saying:

"The state, having granted the medical profession legal authority to control licensure and to pass upon the qualifications of men seeking authorization to practice, must unquestionably possess the right to exact a quality of professional skill and service that will meet the needs of the age, and to require adequate facilities for their distribution to every section of the community. If corporate medicine cannot or will not recognize and meet the demands so insistently made for the development of a system under which competent medical aid will be available—for rural districts especially—no protest can be raised if governments or municipal bodies take steps to inaugurate a system of medical service of whatever type and character may seem best."

And now, at last, we return from this theoretic voyage to foreign countries and are confronted by conditions at home which seem to demand some consideration with relation to the necessity for opposing, or accepting and guiding, state health insurance—otherwise known as *state medicine*. As has been pointed out, nearly every other nation on earth has either voluntary or compulsory health insurance for those citizens who earn less than \$1200 a year; and it seems highly probable that the few nations yet depending upon *voluntary* insurance will change to the *compulsory* form within the next few years. The possible advent of state medicine into some one of our states is by no means a new thought; its coming has been repeatedly predicted, promised or threatened. It does, however, seem to be at this moment more imminent than ever before; an opinion based upon the fact previously referred to, i.e., that throughout our country those who are most closely in touch with current events believe that state medicine is due to arrive shortly unless the profession can forestall it by supplying something in lieu thereof—some improvement on present methods that will



satisfy the demand for better and cheaper service to the mass of citizenry.

In support of that opinion let us remind you that for the third successive year the Legislature of Massachusetts has been presented with an Act to create a department of public medicine and health for the purpose of furnishing a free and complete medical service to the people of the commonwealth of Massachusetts, patterned upon the bureau of medicine and surgery of the United States Navy.

That Act will probably not become a law this year but it is a noteworthy fact that each year it has gained in the number of adherents despite determined opposition on the part of the medical profession; and its author tells us he is encouraged to believe it will ultimately be adopted. Further, we may direct your attention to an Act now pending in the New York Legislature: an Act which covers the entire field of health insurance, unemployment insurance and old age pensions. Again, we feel certain this proposition will be defeated this year; but, what about next year or the year following? These are but single instances, but they may be considered as very definite indications of the direction of the wind; and they are of special import because they have appeared in 2 of the most conservative and most important states in the Union, and because neither Act emanated from a "radical" source; one was drawn by a thoroughly reputable physician, and the other was sponsored by a legislator in good standing—whether or not aided by a physician we do not know.

On our desk there are 28 original articles that appeared in state medical society Journals between May and October 1930, articles not searched for but which were observed in the routine course of inspecting the tables of contents as exchange copies passed through our hands, all dealing with this question of prospective state medicine. Among the authors of those articles we note 3 Ex-Presidents of the American Medical Association; 7 presidents of state societies; 2 presidents of county societies; and the others are all men of prominence in the profession; no "reds", no paid writers, no one "with an axe to grind"—but each and everyone speaking in the interest of his medical confrères. We may add, too, that these writers represent all sections of the nation from Maine to California—including, as it happens, both those states.

We will not bore you now with lengthy abstracts from those articles, but to show that there is no material difference of opinion between physicians of the east and the west, the north and the south, who are awake to the situation, and that there is among them a uni-

versal demand for preparedness, let us refer briefly to 3 or 4 articles arising from widely separated points.

Dr. S. H. Boyer, President of the Minnesota Medical Society, said: "What the attitude of the medical profession shall be in relation to the changes taking place affords food for serious thought. That paternalistic encroachments have taken place is only too apparent. \* \* \* The movement appears to be well nigh world-wide in its scope and its tentacles are reaching hungrily into our own country. It has gathered such impetus now that only a solidly organized and militant profession will be able to ward it off or so modify it as to eliminate its most pernicious features."

At the Annual Meeting of the California Medical Association, April 28, 1930, the Chairman of the Committee on Medical Economics, reporting to the House of Delegates, deprecated the lassitude of the major portion of the organization and scolded them for scant courtesy shown another member who had spent 2 years in study and preparation of a report upon economic conditions. In consequence, in the July issue of the State Society Journal (California and Western Medicine) you will find 3 excellent papers by Drs. Rexwald Brown, of Santa Barbara, John H. Graves, of San Francisco, and John C. Rud-dock, of Los Angeles, reviewing the whole subject.

W. G. Richards, of Billings, Montana, says: "The danger of our present attitude is that while we stand off and quibble the public may take the matter into its own hands and impose upon us some scheme of its own devising."

C. A. Harper, President of the Wisconsin Society, says: "These facts strongly emphasize a popular demand for certain changes that will comply, more or less, with the wishes of the general public. Is it wise for the medical profession to remain indifferent to the problem while these agencies are developing certain lines of activity, or would it not be far better for the medical profession to appreciate the evolution that is now taking place, and become a prominent factor in guiding these various lines of procedure?"

From the New York State Journal of Medicine (Dec. 1, 1930, page 1424) we quote part of an editorial written by Dr. William H. Ross, President of the New York State Medical Society, referring to the program of the Annual Conference of State Society Secretaries: "It indicates that the day of isolation in medicine is over and that medicine must soon undertake a self-appraisal of its own organization to see if its own public medical relationships are such as to enable it

to make proposals for the solution of unsolved and unmet public medical service problems, chiefly just 2—the availability of medical knowledge for limiting illness, and provision for adequate medical care at a cost that can be met without involving the individual in debt from which he can hardly ever recover. It is the obligation of medicine to propose methods for these things, and, also, to work out a solution of how the doctor may be paid for his services to the indigent or near indigent, either in private practice or hospital. \* \* \* There may come another revolution in medical practice, as it has come in the past, as the result of great social needs and social changes; and who knows that it is not beginning? We may be nearer than we know to such things as unlimited old age pensions, provision for adequate medical care by the state, and the inclusion of sickness benefit in Workman's Compensation and Health Insurance as in other countries. It should make us think!"

#### THESE THINGS "SHOULD MAKE US THINK"

That is the note upon which we would close this series of letters.

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## Medical Ethics

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### PATIENTS MUST NOT BE NEGLECTED

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, N. J.

A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

—Sec. 4, Principles of Medical  
Ethics, A. M. A.

We should never forget we are dealing not only with the sick but with human nature and sometimes the human nature we treat is worse than the disease that accompanies it. If we attempt to treat the disease alone we are in

trouble and the patient does not get the full benefit from our treatment. It often takes more skill to treat weak human nature than a weak stomach. What the patients sometime forget is that we are human beings ourselves.

A few years ago the press was full of comments upon a case where allegedly, in one of our cities, a patient had tried in vain among more than 20 physicians to secure any one of them to respond to his call. Like most of such reports, when the story was investigated it was found to be not only greatly exaggerated, but mostly false. But, the story having been spread about in the papers, many people had believed it to be true.

Years ago, the writer remembers a man in his office who boasted that he had never paid a doctor's bill in his life, because if one doctor refused to take the case there were always several who would be ready to respond; and probably he was right. Do we mark this as a credit or a discredit to the profession?

Just as the physician should be free to choose whom he would serve, so should the patient be free to choose whom he desires to treat his case. This needlessly often leads to wailing and gnashing of teeth. Much enmity and harsh criticism of our fellow-man can be avoided if we will all have a heart-to-heart talk with each other about our differences.

Personally, I have never known a physician to abandon a case because he considered it incurable; but I have known many instances where, after he had expressed an honest opinion that he had done all that he could, the patient had *secretly* slipped into the case other doctors who, not being quite so honest, had seemingly worked the case for all it was worth, even up to the bitter end—even giving the family and patient the idea that "if only, etc.", much to the discredit of the first physician. But doctors are no more perfect than men in other professions, and we have even heard of some lawyers doing shady things!

After some especially unkind and uncalled-for treatment, on the part of the patient, to a conscientious and faithful physician—for a sick body often makes for a sick mind—it is only human nature for the doctor to exclaim to himself that he "will never make another call", and he can legitimately do this and retire from the case if he sees to it that he makes it possible for the family to secure the services of another physician.



## Collateral Reading

### REVIEW OF SOME MEDICAL BOOKS

During the past 6 months we have received complementarily from the medical book publishers a considerable number of new books for placement in the library of the Medical Society of New Jersey. Pending provision by the society of a suitable place for housing its library, and proper facilities for a reading room available and convenient to all our members, we have placed these books in the Library of the Atlantic County Medical Society at the Atlantic City Hospital.

The Journal has not space for elaborate reviews of all these books, so we can only express the thanks of the State Society to the donors and in listing the books make brief comments upon the character and contents of a few books that merit special consideration; and commend them to all members as they may be individually interested.

If we may be pardoned for beginning near home, we take pleasure in praising "Clinical Interpretation of Blood Examinations" by Robert A. Kilduffe, of Atlantic City; published by Lea and Febiger, price \$6.50. Observation of his work inclines us to the belief that everything done by Kilduffe is well done; and this book is no exception. He has covered the subject in a comprehensive, all-inclusive, manner and readers may safely rely upon his advice in the matter of interpreting laboratory reports. As a book of reference, for the solving of "blood pictures", it seems to us invaluable, and we extend to author and publisher thanks for providing such a complete, accurate and reliable source of information.

Another neighbor and friend, Dr. Robert N. Keely, of Philadelphia, has turned literateur and gives us "Paris and All the World Besides"; a biographic story of great interest. Those physicians who, as students of medicine in the last decade of the nineteenth century, went "abroad to study in European clinics" will appreciate Keely's description of the many nonmedical attractions that interfered with prescribed curricula even though they afforded opportunities for scientific investigation. Many of his experiences were unique, however, and very few men have had half so many chances to witness or participate in unusual events. It seemed his fate to step from one rare adventure into another, and if we guess correctly he has not yet finished, for in a personal chat within this month he announced the intention to "return to Paris" for a visit this summer. If you want a few hours of communion with a rare soul, and one who

has seen life with the eye of a physician as well as an adventurous traveler, read Keely's book.

"The Baby's First 2 Years" is the title of a small book written by Dr. Richard M. Smith, of Boston, published by the Houghton Mifflin Company (price \$1.75) for the purpose of providing young or inexperienced mothers with sage advice. It is particularly useful in the matter of infant feeding and family physicians could do worse than to recommend this book to mothers who need an adviser ready at hand.

"Easier Motherhood", by Constance L. Todd, gotten out by the John Day Company (\$2), is a lay writer's evaluation of Gwathmey's obstetric analgesia by colonic injections, and if it attains a wide circulation physicians will doubtless soon have their patients prescribing the technic to be followed in delivery. We doubt the propriety of public education by this method. The publisher states that: "One wholesome result of such an informal demand (for Gwathmey's technic) among women would be to make less popular the operative interference with the normal birth process which is now in vogue", etc. Operative *interference* is always wrong; operative *intervention*, even, may sometimes be wrong, and we also feel that too many deliveries are being expedited by aid of forceps or by cesarean section, but that situation cannot be corrected by the patients. It is not many years since some popular magazine writers were insisting that all prospective mothers should demand "twilight sleep". To-day we know that had the profession succumbed to that demand a goodly number of women would have, in consequence, passed into the next world. There is great need for improvement in obstetric practice; possibly there is some need for closer attention to the "humanities" on the part of some obstetricians; but no single method of inducing analgesia or anesthesia has been discovered that is applicable to all cases of child-birth, and when a safe and reliable technic is discovered its suitability for employment in given instances must still be determined by the doctor in attendance rather than by some one in a distant literary office, or even by the patient herself. We do advise physicians to read this book, if only to ascertain what their patients are being taught to expect or demand.

"Suggestion for Contraceptive Practice", published by the Holland-Rantos Co., is a booklet offered to physicians free of charge; containing in condensed form much practical information.

"Treatment of Diseases of Children", by

Lust, published by J. B. Lippincott, price \$8, is a modern treatise that appears to be well worth its cost. The same publisher has recently issued the following excellent books: "Clinical Nutrition and Feeding in Infancy and Childhood", by Kugelmass; "Burns", by Pack; "Tropical Medicine", by Reed; each at the price of \$6. For up-to-date information concerning these several subjects we know of no better literary sources of supply.

"Treatment of Epilepsy", by Talbot, published by Macmillan, \$4, is a timely and very useful book. The general practitioner has not been over-supplied with authentic text-books upon the subject of epilepsy, and this work should find a welcome niche in many office libraries.

Equally practical in character is Carl Beck's "Crippled Hand and Arm", for in this machine age industrial accidents are frequent and industrial surgery has few more important problems than those concerned with treatment of injuries to the hand. For practical consideration of such injuries we commend Beck's book. In this connection, we can also recommend Boehler-Lorenz's "Treatment of Fractures" which has been translated from the German by Steinberg, of Portland, Oregon, and sells for \$5.

C. V. Mosby has sponsored a group of new books that seem worthy of wide circulation: "Infant Nutrition" (\$5.50), by McKim Marriott; "Physiology and Biochemistry in Modern Medicine" (\$11), by J. J. R. Macleod; and "Minor Surgery" (\$10), by Hertzler and Chesky. Again, industrial surgery has created a demand for such books as the last mentioned above.

"The Challenge of Chronic Disease", by Boas and Michelson, and the "Clinical Aspects of Venous Pressure" by Eyster; both published by Mosby, \$2.50 each, are quite appropriate to the present demand for closer study and better treatment of conditions that affect us after 40 years of age and which tend to curtail life. And, in association with these books one may profitably read Gurd's "Infection, Immunity and Inflammation", and Wyatt's "Chronic Arthritis and Rheumatoid Affections", for most chronic affections have their origin in some form of infection that establishes a focal point from which to carry on its devastating work.

If compelled to judge from manuscripts submitted for publication we would say that not so many physicians as should possess a medical dictionary. So, to those in need of such a desk companion we can say that Stedman's, sent to us by the William Wood Company, will be found useful and valuable.

Finally, Johnson and Johnson, of New

Brunswick, offer to send any physician a copy of a very serviceable book, 136 pages, on "First Aid and Medical Service in Industry"; a helpful guide to those called upon to set up infirmaries in shops and factories.

## In Lighter Vein

### Reversed Pimple

Definition of a dimple: A dimple is a lump inside out.—Carolina Buccaneer.

### Wrong Label

"A spoonful of water contains 270,000 potential horse-power", says a scientist. That isn't water.—Life.

### Losing Step with the Joneses

"My dear, I can't get a nurse for love nor money—my baby-carriage is last year's model!"—Passing Show.

### Latest Efficiency Wrinkle

Jaywalker—"So many people are struck by autos while alighting from street-cars."

Street-car Official—"Well, yes; but those people have paid their fares. It's this running over people who are waiting to get on that makes me mad."—Pathfinder.

### Sorting 'Em Out

Soused Voice: "Hello, is this the city morgue? Well, this is the Medical School. We want you to come out and pick out the stiffies so the rest of us can go home."—Pitt Panther.

A new musical instrument, resembling a saxophone, is said to be so simple in design that a child can play it. It is a great pity.—The Humorist.

Government chemists have found a new way to make alcohol unfit to drink, but the bootleggers really didn't need a new way.—Publishers Syndicate.

"What may be a certain cure for one person is often utterly useless in the case of another", says a doctor. It is no good, for example, advising a kleptomaniac to try to take things quietly in the future.—The Humorist.

### Customers That Come Back

We have served people in widely varying circumstances. We have conducted many very costly funerals.

The fact that those we have served once return again, and recommend us to their friends, is, we feel, a high endorsement of the service we render, regardless of cost.—Ad in a Downsville (N. Y.) paper.

### Biggest Boss

"Rufus, did you go to your lodge meeting last night?"

"Nah, suh. We dun have to pos'pone it."

"How is that?"

"De Grand All-Powerful Invincible Most Supreme Unconquerable Potentate dun got beat up by his wife."—U. P. Magazine.



# Preliminary Program

MEDICAL SOCIETY OF NEW JERSEY  
The 165th Annual Meeting, Berkeley-Carteret  
Hotel, Asbury Park  
June 3, 4 and 5, 1931

## ANNOUNCEMENTS

### Credentials and Certificates

The Committee on Credentials will meet at the hotel on Tuesday afternoon, June 2, and on Wednesday morning, June 3. Its office will be open constantly during the meeting.

The Constitution requires that all Fellows, Officers, Delegates, and Reporters shall register with this committee.

Delegates must present to this committee a certificate of election signed by the President and Secretary of their respective component societies. Without such certificate they cannot sit as members of the House of Delegates.

Each member of the Nominating Committee should present his certificate to the Secretary before the opening of the afternoon session so that the names of the Nominating Committee may be announced, as indicated on the program. The Nominating Committee will meet on Thursday, June 4, at 5.30 p. m., in the committee room.

### Papers and Reports

All papers read before the society or appearing by title on the program, whether read or not, thereby become the property of the society. The author of each paper is required to give the Secretary a legible copy of the same *before* reading. The expense of alterations in a paper after it is in type, and the cost of illustrations are borne by the author. All manuscripts should be *typewritten, double-spaced*, and on one side of the paper only. Excepting orations, addresses of special guests, and the Address of the President, the time to be occupied in the actual reading of a paper is *limited absolutely to 20 minutes*. Those opening the discussion are allowed 10 minutes each, others 5 minutes each.

Members desiring to present voluntary papers or reports of cases should first have their papers accepted by the Committee on Scientific Work and then apply to the Committee on Program for a position.

Papers and reports not presented when called for by the President cannot be presented at a later time unless the regular order of business is completed.

All members of component societies who are in good standing are entitled to sit as associate members and have the privilege of discussing papers in the general session, but have no vote nor the right to take part in the discussions of the House of Delegates.

On arising to discuss a paper, the speaker will please walk forward to platform and announce his name and address clearly for the benefit of the society. No member may speak a second time in any discussion.

All sessions will be opened promptly at the hour set, in order that the program may be carried out as planned.

The Board of Trustees will meet at the Berkeley-Carteret Hotel, Tuesday, June 2, at 8 p. m.

Committees or Boards desiring meeting rooms

will please notify the Committee on Arrangements, M. W. Reddan, Chairman, or W. D. Olmstead, Secretary.

The Berkeley-Carteret is operated on the European plan and the following special convention rates are available to our members:

\$5 per day, single room, bath or shower.  
\$8 per day, double room, twin beds, and bath or shower.

All rooms are priced alike. Make hotel reservations direct.

The Berkeley-Carteret serves very splendid *table d'hote* meals at the following prices:

Breakfast .....	60c to \$1
Luncheon .....	\$1.50
Dinner .....	\$2

In addition to the above, *a la carte* service is available at all times for those who prefer it.

### Exhibits

Exhibits of instruments, books, pharmaceutical preparations, x-ray apparatus, etc., will be shown in the "Exhibit Hall" of the hotel and members are urged to avail themselves of this opportunity to examine the very latest improvements in these various departments.

The degree of interest shown by the visitors in these exhibits mathematically increases or decreases the revenue to the society. It's up to you to help.

## HOUSE OF DELEGATES

Wednesday, June 3, 1931, 10.30 A. M.

- Call to Order.
- Report of Committee on Credentials.
- Reading of Minutes of 1930 Meeting.
- Report of Committee on Arrangements and Program.
- Report of Committee on Scientific Work.
- Report of Committee on Publication.
- Report of Secretary.
- Report of Executive Secretary.
- Report of Field Secretary.
- Report of Welfare Committee.
- Report of Board of Trustees.
- Report of Judicial Council.
- Report of Treasurer.
- Report of Committee on Finance and Budget.
- Report of Committee on Honorary Membership.
- Report of Board of Medical Examiners.
- Report of Committee on Post-Graduate Instruction.
- Report of Committee on Hospitals and Medical Education.
- Report of Committee on Indemnity Insurance.
- Report of Committee on Group Health and Accident Insurance.
- Report of Delegates to the American Medical Association and to State Societies.

### Afternoon Session

Wednesday, June 3, at 2.30 P. M.

- (1) Unfinished Business.
- (2) New Business.

## SECTION OF SCHOOL PHYSICIANS

Wednesday, June 3, at 2.30 P. M.

Chairman: Allen G. Ireland, Director of Physical and Health Education, State Department of Public Instruction, Trenton.

- (1) Foot Examinations in Public Schools  
Donald B. Hull, Ridgewood
- (2) Physician's Part in Training of Teachers  
Grace M. Kahrs, Jersey City (Physician  
for the State Normal School at Jersey  
City.)
- (3) Facts in a Child Health Program of Com-  
mon Interest to School and Community  
Health Officials  
I. W. Knight (District Health Officer, State  
Department of Health.)
- (4) Health in Education from the Point of View  
of a School Administrator  
Winton J. White, Englewood (Superin-  
tendent of Schools.)

### GENERAL SESSIONS

#### Scientific Program

#### Thursday, June 4, at 10 A. M.

- (1) Surgical Aspects of Biliary Tract Disease  
John B. Deaver, Philadelphia  
Discussion opened by Max Danzis, Newark.
- (2) Value of Duodenal Tube Drainage of the  
Biliary System and Treatment of Various  
Diseases and Disorders of the Liver  
B. B. Vincent Lyon, Philadelphia  
Discussion opened by Geo. H. Lathrope, Newark.

#### Thursday, June 4, 2.30 P. M.

- (1) Fusospirochetal Diseases of the Lung  
(Illustrated with lantern slides)  
F. J. Altschul, C. A. Pons, and  
W. G. Herrman, Long Branch  
Discussion opened by William P. Belk, Phila-  
delphia.
- (2) Cardiac Irregularities, their Clinical Recogni-  
tion  
Philip Marvel, Jr., Atlantic City  
Discussion opened by Harvey M. Ewing, Newark.
- (3) Silent Mitral Stenosis; its Detection and  
Significance  
J. Polevski, Newark  
Discussion opened by A. E. Jaffin, Jersey City.
- (4) Epitheliomas of the Skin; Differential Diag-  
nosis and Treatment (Illustrated with lan-  
tern slides)  
Bart M. James, Newark  
Discussion opened by H. J. F. Wallhauser,  
Newark.

#### Friday, June 5, 10 A. M.

- (1) Radiation of Bladder and Prostatic Carci-  
nomas  
Benjamin S. Barringer, New York City  
Discussion opened by Stanley R. Woodruff,  
Jersey City.
- (2) New Views on Pathogenesis, Diagnosis and  
Treatment of Ulcer and Cancer of the  
Stomach, Cholelithiasis and Diseases of the  
Digestive Organs in General  
A. L. Soreci, New York City  
Discussion opened by Joseph Samenfeld, Brook-  
lyn.
- (3) Findings of the Governor's Conference on  
Child Welfare and Protection.  
Frank C. Johnson, New Brunswick  
Discussion opened by Henry O. Reik, Atlantic  
City.

- (4) Rôle of the General Practitioner in Conserva-  
tion of Vision

Elbert S. Sherman, Newark  
Discussion opened by Elias J. Marsh, Paterson,  
and Lewis H. Carris, Managing Director of  
the National Society for the Prevention of  
Blindness.

Special Order—12 Noon

Presidential Address

George N. J. Somner, Trenton

#### Friday, June 5, 2 P. M.

- (1) Election of Officers (No other business).  
Scientific Program at 2.30 P. M.
- (2) Fees, Specialists, and Kindred Annoyances.  
Elias J. Marsh, Paterson  
Discussion opened by George H. Lathrope,  
Newark, and Ephraim R. Mulford, Bur-  
lington.
- (3) An Etiologic Conception of the Disease  
Entity  
H. B. Logie, New York City
- (4) The Conditioned Reflexes of the Cerebral  
Cortex. (Pavlov's epoch-making investi-  
gations of the physiologic processes under-  
lying the phenomena of thought, feeling  
and conduct. Clinical problems of various  
functional psychoneuroses his work eluci-  
dates.)  
William H. Hicks, Newark
- (5) Manganese Poisoning  
F. P. Wilbur, Franklin  
Discussion opened by Christopher C. Beling,  
Newark.
- (6) The State's Provision for 3 Types of Deaf  
Children  
Ethel Warfield, Trenton Junction,  
Field Worker, New Jersey School  
for the Deaf

### SECTION OF OPHTHALMOLOGY, OTOTOLOGY AND RHINOLARYNGOLOGY

Chairman: Elbert S. Sherman, Newark

#### Thursday, June 4, 9.30 A. M.

- (1) A Muscle-shortening Operation  
Harry V. Hubbard, Plainfield  
Discussion opened by George F. Sullivan, Ho-  
boken.
- (2) Clinical Management of Heterophoria  
John H. Dunnington, New York City
- (3) Combined Orthoptic and Operative Treat-  
ment of Convergent Squint  
Linn Emerson, East Orange

#### Thursday, June 4, at 2 P. M.

- (1) Tumors in the Neighborhood of the Optic  
Chiasm, with Special Reference to Eye  
Symptoms  
Thomas H. Johnson, New York City  
Discussion opened by Wells P. Eagleton, Newark.
- (2) Ocular Manifestations of Focal Infection  
Samuel T. Hubbard, Hackensack  
Discussion opened by Charles Zehnder, Newark.
- (3) Non-traumatic Hemorrhage in the Vitreous  
of Young People  
Charles Franklin Adams, Trenton  
Discussion opened by Wallace Pyle, Jersey City.



**Friday, June 5, at 9.30 A. M.**

- (1) Some Cases of Facial Paralysis  
E. P. Cardwell, Newark  
Discussion opened by James A. Fisher, Asbury Park.
- (2) Important Factors in Surgery of Congenital and Acquired Facial Deformities  
Jacques W. Maliniak, Newark  
Discussion opened by H. C. Barkhorn, Newark and H. H. Kessler, Newark.  
General Session Room  
Special Order—12 Noon
- Presidential Address  
George N. J. Sommer

**Friday, June 5, at 2.30 P. M.**

- (1) Allergy as a Factor in the Etiology of Diseases of the Nose and Paranasal Sinuses  
Royce Paddock, Newark
- (2) Accessory Nasal Sinus Infection in Children  
G. W. Strickland, Roselle
- (3) The Credulity of Rhinologists Anent the Sinuses  
Charles S. McGivern, Atlantic City  
Discussion opened by Charles H. Schlichter, Elizabeth, and Henry C. Barkhorn, Newark.

**SECTION OF PEDIATRICS**

Chairman: Elmer G. Wherry, Newark

**Thursday, June 4, at 10 A. M.**

- (1) Tonsil Problem  
Chester R. Brown, Kearny  
Discussion opened by Henry C. Barkhorn, Newark.
- (2) Symptomatology and Treatment of Thymus Gland Conditions in Children  
Paul Hosp, Newark
- (3) Clinical Evaluation of a Palatable Concentrate of Vitamins A and D  
Joseph A. Marcus, Atlantic City

**Thursday, June 4, at 2.30 P. M.**

- (1) Treatment of Heredosophylis  
F. J. McCauley, Newark  
Discussion opened by Robert R. Sellers, Newark.
- (2) Blood Transfusion as a Therapeutic Agent in Pediatrics  
Lewis W. Brown, Newark

**Friday, June 5, at 10 A. M.**

- (1) Results Obtained in 40 Cases of Eczema on a Milk-Free Diet  
Julius Levy, Newark
- (2) Importance of Differential Study of the White Blood Cells, as Illustrated by Certain Cases  
Royce Paddock, Newark
- (3) Influenzal Meningitis; Report of a Recovered Case.  
F. C. Johnson, New Brunswick  
Special Order—12 Noon  
General Session Room
- Presidential Address  
George N. J. Sommer

**WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF NEW JERSEY**  
**FOURTH ANNUAL MEETING**

Berkeley-Carteret Hotel, Asbury Park.

**Wednesday, June 3**

Golf Tournament for both women and men at the Asbury Park Golf Club.

**Wednesday, June 3, at 1 P. M.**

Luncheon (subscription) and Executive Board Meeting.

**Wednesday Evening, June 3**

Dutch Treat Supper Dance at Monterey Grill.

**Thursday, June 4, at 9.30 A. M.**

North Solarium  
Call to Order Mrs. John Nevin, President  
Prayer:

Ecclesiasticus 38: Honor the physician for the need thou hast of him: for the most High hath created him. For all healing is from God, and he shall receive gifts of the king. The skill of the physician shall lift up his head, and in the sight of great men he shall be praised.

Minutes of Last Meeting

Mrs. Dan S. Renner, Recording Secretary

Financial Statement

Mrs. Edward Clarke, Treasurer

Report of Standing Committees

Report of County Presidents

Speeches limited to 2 minutes

Appointment of Nominating Committee

Report of Committee on Revision of Constitution  
New and Unfinished Business**Thursday, June 4, at 1 to 5 P. M.**

Entertainment by Monmouth County Auxiliary  
Boat trip on steamer leaving Long Branch at Pleasure Bay dock about 1.30 and returning about 5 p. m. Trip will cover the Shrewsbury River out past Atlantic Highlands, Twin Lights, and along Sandy Hook into Lower New York Bay.

Buses will leave Berkeley-Carteret Hotel about 1 o'clock and will return guests to hotel after the trip.

Luncheon will be served at Fort Hancock.

**Thursday Evening, June 4, at 7.30 P. M.**

Crystal Room

Dinner Dance (Subscription).

**Friday, June 5, at 9.30 A. M.**

North Solarium

President's Report Mrs. John Nevin, President  
Report of Nominating Committee  
Election of Officers  
Unfinished Business  
Installation of New Officers

**Friday, June 5, at 1 P. M.**

Auxiliary Luncheon (Subscription).

Guests of Honor:

Mrs. John O. McReynolds

Mrs. John Nevin  
 Mrs. H. Roy Van Ness  
 Dr. George N. J. Sommer  
 Dr. John F. Haggerty

### GENERAL ENTERTAINMENT

The following entertainment has been arranged for by the Committee on Program and Arrangements in coöperation with the Program Committee of the Woman's Auxiliary and a Special Committee appointed by the President of the Monmouth County Medical Society.

#### Wednesday, June 3

Golf Tournament, all day, sponsored by the Monmouth County Medical Society, at the Asbury Park Golf Club, for men and women. All members of the Medical Society of New Jersey, and all members of the Woman's Auxiliary to that Society, are cordially invited to participate.

Prizes will be awarded for *low gross* and *low net* scores—18 holes—for both men and women players.

Also, there will be 4 prizes for winners and runners-up in a Scotch 4-ball foursome for men.

#### Wednesday, June 3, at 8 P. M.

Dutch Treat Supper Dance at the popular Monterey Grill; special music furnished by the management.

#### Thursday, June 4, at 8 P. M.

Dinner Dance in the Ball Room of Berkeley-Carteret Hotel. A splendid dance orchestra and a hostess entertainer will be provided. Beautiful prizes will be furnished by the Woman's Auxiliary. Reservations must be made at the registration desk. Everyone is invited.

#### Friday, June 5

Golf for those who wish to play.

Special entertainment for the ladies for Friday afternoon will be announced later.

Splendid meetings, teeming with interest, have been arranged for and all members are urged to attend.

Committee on Program and Arrangements.

## Presessional Reports

### ANNUAL MEETING

#### Presessional Report of the Welfare Committee

The newly appointed Welfare Committee held its organization meeting at the Stacy-Trent Hotel, Trenton, November 9, 1930. A. Haines Lippincott was reelected chairman.

The report of the secretary, reviewing the work of his office during the past summer, was presented. Radio broadcasting of medical programs in those sections where proper facilities exist was thought to be worth while and it was decided to continue the practice. The report covered briefly the programs of the Field Secretary, Mrs. Taneyhill, whose work has enlarged very much. The demands on Mrs. Taneyhill's time are constantly increasing, due to the excellent coöperation of the State Board of Education, whereby she has ar-

ranged contacts with all the school organizations of the state.

Dr. Leo Haggerty, of Trenton, again volunteered his valuable assistance in keeping us in touch with proposed legislation that might need our consideration, and the status of such bills. The profession and the people of New Jersey owe a great debt to Dr. Haggerty for giving his valuable time to this task.

There were many bills dumped into the hopper this year that might be classed as medical legislation. After careful study of this proposed legislation by Dr. Reik, he concluded that there were about 20 Bills that required consideration by the Welfare Committee. These bills were carefully considered by the Committee and a plan of action decided upon.

It was decided that the Executive Secretary should send a letter to every member of both houses of the Legislature informing them of the action of the Committee and the reasons for approval or disapproval in each instance.

Under the watchful eyes and convincing arguments of Drs. Newcomb and Hargraves, in the Assembly, and Dr. Cole in the Senate, supported by the many friends of the profession who are members of both Houses, at this writing we seem to have checked or defeated all proposed legislation that had not the stamp of our approval.

We cannot be too optimistic, however, regarding the future. We have learned our lesson from past experience that there is not always safety in quiescence.

The politicians this year had a diversion that has taken up a great deal of their time and thought. The great mass of bills that came out of the report of the Abell Commission has possibly drawn their attention from other matters in which we as physicians are particularly interested.

The Abell Report dealt with many changes and methods in state government, and we were to a certain extent drawn into the whirl. We are interested in the appointment of physicians to Boards and Commissions where medical counsel will benefit the state. While it has not been necessary to call the Welfare Committee together but 3 times, the members responded to those calls magnificently, with an enthusiasm and a willingness to serve their profession and their state in such manner that makes me proud of the honor of having been chosen chairman of this group of physicians.

A. Haines Lippincott, M.D.,  
 Chairman.

### PRELIMINARY REPORT OF COMMITTEE ON HEALTH & ACCIDENT AND AUTO-MOBILE INSURANCE

Since our annual report to the House of Delegates in June 1930, published in the Transactions (Sept. Sup. 1930, p. 27) progress in the favorable reception by members of our Health and Accident policy, offered them through the society, has been gratifying, and the settlements by the claim department have been extraordinarily liberal and, without a single exception, satisfactory to claimants.

Our keenness to make avail of any opportunity to improve the contract, in coverage, or in premium rates, has resulted in successful negotiations by which the term for indemnity for total disability from illness, is now increased from 4 to 6 weeks, and the requirement that the total disability must be "house-confining", is *abolished*. Prior



to this change, the committee often secured a liberal adjustment for a member, in this matter of house-confinement, beyond the terms of the policy, but now we have it secured in the contract.

We strenuously urge more consideration by our members of the advantages of this policy on Health and Accident insurance (which all doctors should carry) for the reason that an increased number of policy-holders will materially help our negotiations for even more benefits.

The policies on automobile insurance are, as before, standard policies, offered our members at a discount of 15 to 30%. These also have been well received and are universally acceptable.

At the June convention an agent will be on hand, with an exhibit, and ready to interview members and answer inquiries.

Frank W. Pinneo, M.D.,  
Chairman, for the Committee.

### PRESESSIONAL REPORT OF THE EDITOR AND EXECUTIVE SECRETARY

Our society rules require publication of annual reports at least one month prior to the annual meeting. The period of time that must intervene between the writing of this report (April 10), for inclusion in the May Journal, and the end of our fiscal year, compels us to present a message that is preliminary and incomplete in character, and to request the privilege of making alterations and additions when preparing our final report for presentation to the House of Delegates in June. Such tasks as have been completed can be reported in full; those having 2 months yet to run will necessarily have to be revised. We ask that this document be considered as only a preliminary report.

(1) *The Journal*. If a president of the United States may without injury to his native modesty "point with pride" to the accomplishments of his administration, surely a mere editor may be excused for directing attention to the things he has done or attempted to do during his reign. While serving in France with the American Expeditionary Forces, we learned some of the principles of successful warfare: (1) Over the top and dash for the first objective! (2) Hold it! (3) Consolidate your gains! (4) Prepare to carry along all you have won and to jump off from the advance post at the next zero hour for a new objective. Thus, step by step, never relaxing hold upon any point attained, and always reaching toward new attainments, our efforts were crowned with success. Pershing's tactics were justified in war, and his battle principles seem applicable to most progressive affairs in civil life. So, we have endeavored to apply them to journalism.

In 1924 the Journal of the Medical Society of New Jersey was practically a replica of all other state medical society journals; that is to say, it regularly consisted of about 6 sections, or departments, covering original articles, editorials, an occasional special article or case report, county society reports, obituaries and news items. The total of reading matter for the year making 400 pages. In 1930 this Journal exceeded 1000 pages—with an incidental increase of page size—embracing not 6 but 16 distinct sections or departments. One at a time, commencing with Lighthouse Observations and running through Ethics, Esthetics, Economics, Public Relations, Collateral Reading, School Health, Public Health, Current Events, and Woman's Auxiliary, 10 new departments have been introduced and by constantly adding and never

abandoning any established project, we have reached the present admirable monthly edition, to which we dare "point with pride".

May we say that this degree of success has not been attained without many hours of hard labor—many hours more than the labor union restriction of an 8-hour working day—for our day never shows less than 12 and seldom less than 16 hours, and, as we suppose must be true, the editor of any periodical often wishes he might know whether his clientèle is sufficiently well pleased to justify all this expenditure of time and energy.

Occasionally someone thinks to express general approval or to praise a particular feature of the journal; and on such days there is much joy in the editorial office. Recently we had a "red letter day". While attending a Cumberland County Society meeting one member voluntarily stated his pleasure in reading this Journal and his pride in it as the organ of his own state society. We asked what he liked best about it, and we were somewhat surprised by his response: "I like it best because you are giving us such a variety of interesting matter, all bearing on medicine or related to our professional lives, and yet much of it being material that I never before saw nor expected to see in a medical journal." It is scarcely necessary to say that we were rendered very happy, for he was the first to have mentioned discovery of the goal toward which we have been striving. It is the present purpose of the Journal to record the scientific work of New Jersey physicians, to supply them with information concerning medical progress, to constitute itself a monthly medium of post-graduate instruction, and to keep its readers in touch with any and every thing that can be serviceable to practitioners too busy to read extensively in the field of general knowledge.

Returned home from that meeting we hastened to compare your Journal with those of other states, and we find that no other journal in this country, state or national, offers anything comparable to the wide variety of regular, monthly literary pabulum of high grade that is contained in the Journal of the Medical Society of New Jersey. A few of the other state journals are "better dressed" and make a more striking appearance because they use a better quality of paper—especially important in the reproduction of illustrations—but in most other respects we excel. Not only do we surpass other publications in variety but we are providing a much greater quantity of first class medical reading. As repeatedly pointed out, we consider many of our regular hospital staff and county society reports fully equal to the average of original articles published in any journal.

By way of comparing our own progress in respect to quantity of scientific matter published, our office secretary, Miss Mahoney, tabulated the material in the bound volumes of 1924 and 1930. The resulting figures showed 62 original articles in 1924, and 124—exactly double—in 1930; 13 pages of editorials in 1924, against 29 pages in 1930; 62 county society reports in 1924, and 124 in 1930; 48 pages of society and hospital reports in 1924, and 163 pages last year. And this does not take into consideration the wealth of excellent original material now annually contributed through the Tristate Conference.

That you may have personally an opportunity to make some comparisons, we are, following the plan of last year, exhibiting in the adjoining room the regular May issue of some 30 other state society journals, and we invite criticism and suggestions for further improvement of your own

magazine. The only recommendation the editor has to offer at present is that as soon as the financial situation permits, we may be instructed to contract for a heavier grade of paper with a good reproducing surface.

As stated before, we fully appreciate any word of praise accorded our work but we reached the pinnacle of happiness a few days ago, when the monthly bulletin of the Middlesex County Society, issued as a call for the April meeting, carried the following announcement: "Hereafter, the Saturday Evening Post stays on the shelf; the Journal comes first." We thank the secretary of that society.

(2) *County Societies.* During the fiscal year it has been our privilege to visit all but 2 of the 21 county societies at least once, and to have made 2 visits to one county and 3 to another. It is a pleasure to report that all of the component societies are active and most of them are functioning in a praiseworthy manner. Following the custom established by his immediate predecessors, President Sommer has also attended regular meetings of each and all (we believe) of the county organizations, and we note with increasing satisfaction, the good results of these presidential visits and the visits made by the secretary of the state society, Dr. Morrison. It is not solely that the county members and the officers enjoy an exchange of pleasantries and sociability, but each county unit feels that it is an important integral part of the state and national organization. With state officials present to be quizzed, the county members have brought up for consideration some of the problems that beset them and which vary in different communities. Especially is this true of economic problems, and this year it has become manifest that the state society must help to solve some of these problems, particularly those relating to the Workmen's Compensation Law, and those growing out of industrial medicine as it is developing in a variety of forms all over the state. We respectfully suggest that the House of Delegates shall take some action with reference to these matters.

The Annual Conference of Secretaries and Reporters of County Medical Societies was held at Trenton, November 5, 1930, and this proved to be the most interesting session so far held. The proceedings were published in full in the December Journal, pages 1000 to 1020. It was at that conference that Dr. Walter F. Donaldson, Secretary of the Pennsylvania Medical Society, spoke of the advantages of Councilor District Meetings, and it was out of the discussion following that of our own secretaries, lead by the presiding officer, Dr. George H. Lathrope, devised the plan for trying such district meetings in this state. Our 5 districts have all held meetings during the past few months and while different plans were used, according to the needs or the wishes of different sections, or as experiments in some regions, we believe that all proved successful; and we anticipate that the society will be asked to give official endorsement to the general scheme.

It was at that conference, also, that Dr. Morrison read his paper on the possible imminence of state medicine; calling attention to its rapid spread in foreign countries, its appearance in Canada and its threatened advent here as evidenced by bills introduced into several state legislatures. The conference, at the suggestion of Dr. Fuhrmann, of Hunterdon County, adopted a resolution to ask the state society at this annual meeting to appoint a special committee to investigate the working of so-called state medicine in

other states and countries, to collect all available data, and to report the results at some future date.

In passing we desire to report that these conferences have had a very beneficial effect upon many of the county societies; one very noticeable improvement showing in the character of programs now being issued.

(3) *Woman's Auxiliary.* This organization continues to thrive and we think has made definite progress this year. The editor is lending such aid as he may through the Journal and continues to hope that an effective organization will ultimately develop in every county.

Coöperating with the president of the state auxiliary, Mrs. Nevin, he has suggested, as a task for the auxiliary, an effort to control some of the obnoxious advertising being published in papers and magazines and broadcast by radio. Mrs. Nevin will probably present that question for consideration by the auxiliary and by the society during this meeting.

(4) *Educational Work.* Our program during the year has been even more extensive than usual. The field secretary will report personally upon that part of the program entrusted to her. We would only say here that she has, with the assistance of the State Department of Education, reached a very large number of desirable audiences and that she has accomplished the fulfillment of a huge program. That her work has been of superior character is evidenced by the number of commendatory letters received from each of the counties visited by her, and by the almost universal request that she return again next year.

Our radio program has been carried this year mainly by the county societies, and in our complete report to the society in June we will furnish a statement of the broadcastings from Atlantic Bergen and Monmouth county societies.

(5) *Public Relations.* Among the larger movements participated in this year were the Hoover Child Welfare Conference in Washington and the similar state conference called by Governor Larson. We were invited to speak at the last mentioned gathering on the subject of coöperation, and we endeavored to make clear to lay organizations the relationship of the medical profession to such movements and the conditions upon which we must insist if there is to be effective coöperation in public health work.

Through an editorial in the February Journal we took exception to some of the advertising recently put out in printed form and by radio, which in our opinion was insulting to the medical profession. The instance cited was not the only one that might have been used. The radio threatens to become more of a nuisance than a blessing unless a curb can be put on objectionable forms of advertising. We feel that the profession should object to, and should actively oppose, a number of things now being done under the cloak of radio entertainment. For instance, Amos and Andy are being employed to veil an advertisement that has passed from endorsement of a tooth paste into actual prescribing of an alleged powerful anti-septic for sore throat and colds in the head. We suggest that the society give thought to this matter and consider what action may or should be taken.

(6) *Tristate Conference.* The proceedings of each successive conference have been published in full in our Journal and we recommend continued support of this project.

(7) *Legislation.* State and national legislation has occupied much of our time during the past



winter and spring but we are happy to report that nothing detrimental to public health got past us. More details will be supplied in our complete report in June.

Respectfully submitted,

Henry O. Reik, M.D.,  
Editor and Executive Secretary.

## Lighthouse Observations

### HEAD INJURIES OF MODERATE DEGREE

In a general review of 100 cases, including 50 in which ventricular studies were made, George W. Swift (Northwest Med., 30:16, January 1931) says:

"One-third of all head injury cases seen in industrial surgery fall into a group of minor injuries. Perhaps there is some temporary loss of consciousness, but the patients are strong individuals and to them it is more or less trivial. As soon as the lacerations, if any, are healed, they are ready to resume their work. With these we have no further interest except to call attention to the fact that a strong, robust individual who receives a minor injury to his head, with no actual injury to the brain tissue, almost universally returns to work at the earliest possible moment.

On another side we have that group of patients who constitute perhaps another third of the sum total, who receive a perfectly obvious total permanent disability, which is so recognized by the attending physician and the Department of Labor and Industries. This group of cases does not interest us in the present discussion.

The remaining third is that group of patients who, after a period of time, do not adjust themselves to their present condition. The factors involved in this failure of readjustment are, of course, first of all the injury itself. The more severe the injury without total disability, the more easy it is to observe physical findings which will correspond to the subjective symptoms. This, one might say, would constitute the upper margin of disability in this particular group, while the true malingerer, the man who feels that the state owes him a living and uses a head injury merely as a subterfuge, would be found at the other end of the list. A great many patients are found between these 2 extremes and the factors which might be noted as contributing somewhat to their inability of readjustment are: Suggestion on the part of the doctor, the relatives or other patients, particularly those suffering from a similar injury, perhaps of a more severe degree. An unstable or nervous temperament almost universally leads to failure of readjustment, even though the injury may be very slight. Lastly, repeated injuries of the same character to the same individual, each causing a more lasting impression upon his mental processes.

It is this group of cases which causes the greatest difficulty both to the State Department of Labor and Industries in arriving at a just compensation or to insurance companies in estimating the amount of compensable disability, and to the physicians who are called upon to make these estimations and evaluations.

With these facts in mind, a study has been made of 100 cases falling in this last group, that is, those who have suffered injuries to the head and have not been able to readjust themselves to the conditions found following the injuries. In this are included 50 ventricular studies, used as a

check on the general physical examination. These examinations were all made at the request of the Department of Labor and Industries (Washington State) and wherever there was a reasonable doubt that there was actually a physical lesion which could be the cause of the failure of readjustment, a ventricular study was done.

The average age of the patients was 42 and the average time between the injury and our examination was 8 months. Only 12 of the 100 patients showed positive fractures in the roentgenograms which were taken. We have, then, a composite picture of a man approximately 42 years of age, who 8 months prior to our examination had suffered an injury to the head which had caused subjective symptoms, such as severe headache, dizziness, general weakness, disturbances in hearing and vision, loss of memory and localized pain, who presented practically no neurologic findings except increased reflexes and passive congestion of the vessels of the retina. In only 12% of cases did roentgenograms show fracture of the skull, yet this average individual has been unable to adjust himself to his surroundings.

In tabulation of the roentgenograms, showing displacement of the ventricles, we find bilateral displacement in 2 cases, dilatation of the ventricles in 4 and compression of the ventricles in 4. In 13 cases, or 26%, air showed over the cortex.

In glancing at the subjective symptoms, we find disturbance of hearing, disturbance of vision, localized pain and general weakness in about the same percentage of cases as we find distribution of air over the cortex. Practically all patients showing air over the cortex complained of these symptoms. There does not seem to be any relation between the degree of headache and dizziness and the ventricular findings of air over the cortex or disturbance in the ventricular system. As practically all of the patients on whom a ventricular study was made complained of both headache and dizziness and only 25% showed cortical air, it is fair to assume that only 1 in 4 actually were suffering from severe headache and dizziness.

This brings us, then, to discussion of the relative value of the history, physical examination and ventricular study in these cases. Obviously, the history, while important, if combined with the patient's statement as to symptoms, is of value in only 25% of the cases. Nor does the physical examination yield much more information. The ventricular study is more accurate and gives positive findings. Particularly is this true in the case of a general edema and it also suggests the treatment which is of greatest benefit to these patients, namely, dehydration followed by limitation of fluid intake.

It is not going to be possible to secure ventricular studies on all questionable cases, nor will it be possible to estimate exactly the degree of compensable injury, but it will be possible for the medical profession to give better treatment at the very beginning of the injury. This, no doubt, will do away with many actual disabilities. It will not help in those cases in which there is a tear of the arachnoid with accumulation of cerebrospinal fluid about the cortex, as first noted by Naffziger. Secondly, we must look forward to the time when all those engaged in active industry shall have to submit to a physical examination and have noted the actual condition present at the time of securing the position. An injury subsequent to this examination can be checked by the previous physical condition of the patient. Lastly, there must be in industry, just as there is in our colleges today and in the business world, a reclassification

from the standpoint of temperament and adaptability. Men who are constitutionally psychopathic to begin with cannot be permitted to enter hazardous occupations, where the slightest injury will bring about claims for complete and total disability.

## Public Relations

### GOVERNOR LOOKS AT CHIROPRACTIC

(From Jour. A. M. A., 96:1148, April 4, 1931.)

Governor Buck, of Delaware, has returned to the legislature, without his approval, a bill to create a board of chiropractic examiners and to regulate the practice of chiropractic. His summarization of the reasons for his veto is so clear and terse that it should be read by the legislators and governors of every state that is threatened or already afflicted with this cult. His statement follows:

The purpose of the act, as I understand it, is to legalize the practice of chiropractic in this state. Practitioners of this cult are not recognized now. Do they profess to be doctors in the same sense of the term as is commonly understood to apply to men and women of the medical profession? Insofar as I am able to determine, there is not a recognized medical school in the country that includes in its curriculum a course in chiropractic. This fact in itself seems singularly significant.

*Even to the lay mind the idea that all disease of whatever character is due to spinal displacements of a mild sort, and that cures of such ailments as tuberculosis, small-pox, diphtheria, scarlet fever and others can be effected by manipulation and flogging of the spine is preposterous.*

Before returning this bill to you I have satisfied myself that the training and education a chiropractor, or a drugless healer, needs to practice his art does not fit him properly to advisedly treat the sick, inasmuch as *he is not qualified to diagnose ailment nor recognize communicable diseases* and to take measures to control them. He is therefore an opponent to the department of health.

Wherefore, it seems to me it would be *inconsistent for the legislature to appropriate, as it will do, money for the state board of health, which board is trying to eradicate communicable diseases, and at the same time legalize the practice of a cult which does not believe in the germ theory of disease* but does teach and believe that such diseases as scarlet fever, etc., are due to a distracted vertebra and the method to prevent and cure such disease is to see that everybody has a normal spine. (Italics supplied by Editor.)

### NEWARK TOPS CLASS IN HEALTH RATING

#### U. S. Chamber Also Cites Three of Oranges For Conservation Work

(Washington Bureau, Newark News)

Newark last year was the leading city of its class in health conservation in the United States.

The city received first rating today for cities between 250,000 and 500,000 population in the national health conservation contest conducted by the Chamber of Commerce of the United States with cooperation of the American Public Health Association.

East Orange, West Orange and South Orange

were among 30 "honor" cities named by the judges in addition to 6 class winners. In last year's contest, East Orange won first place among cities of 50,000 to 100,000 population.

The 5 winners, in addition to Newark, among 149 entrants were: Above 500,000, Detroit; 100,000 to 250,000, New Haven; 50,000 to 100,000, Racine, Wis.; 20,000 to 50,000, Alhambra, Cal., and less than 20,000, Chestertown, Md.

Reports from entrants were submitted several months ago and analyzed by a grading committee. Personal inspection by the committee was made of winning cities before awards were announced.

Contest points included water supply, sewage disposal, protection of milk supply, preventive measures, medical conferences and clinics, programs for prevention and early care, life loss statistics for preventable diseases and support for local health work by official and unofficial agencies.

Awards will be presented April 28 to May 1 at the annual meeting of the national chamber in Atlantic City.

### REPORT TO THE COMMISSIONER OF LABOR BY THE WORKMEN'S COMPENSATION ADVISORY COMMISSION

Newark, N. J.,  
March 11, 1931.

Honorable Charles R. Blunt,  
Commissioner of Labor,  
Trenton, N. J.

Dear Sir:

The undersigned, constituting an Advisory Committee appointed by you to examine into the operation of the Workmen's Compensation Bureau of the Department of Labor and the administration of the laws relating to the same, beg to report as follows:

The Workmen's Compensation Act, which was originally enacted in 1911, was designed to secure to injured workmen or their dependents, definite amounts of compensation for injuries suffered and pecuniary loss sustained, irrespective of the question of fault and negligence on either part of the employee or employer, and it was intended that the statute should be liberally construed in order that the economic loss resulting from injury to the employee should be reduced as much as possible. Amendments to the law have been made from time to time, increasing the amount of compensation awarded for the term for which the stated compensation should apply, and in other respects as experience demonstrated defects and weaknesses in the original Act.

In order to obtain as wide and as thorough investigation as possible you have appointed as members of the Advisory Commission representatives of labor, industry, law, medicine and insurance, and in the conduct of our investigation we have extended invitations to various groups representing these various interests, and have been favored with their views on a number of questions relating to the Act itself, and to the operation of the Bureau.

We find at the outset that, while the cases reported to the Bureau during the first full year of its operation numbered 11,922, during the year 1930 the total number of cases had increased to 28,269. These figures would seemingly indicate the necessity for enlarging the administrative staff, as well as the equipment and facilities necessary to proper administration of the law, but we find that there has been no increase in personnel, equipment or



other facilities proportionate to the increase of the business of the bureau, and this fact has been the cause of a number of criticisms which have been addressed to us. The old headquarters of the Bureau at No. 9 Franklin Street, in the City of Newark, were notoriously inadequate and removal of the department to the new headquarters in the Industrial Building has eliminated one of the chief causes of complaint to which our attention has been called.

A majority of the various interests that have given us their views with reference to the operation of the Bureau, are of the opinion that the Bureau has not a sufficient personnel in the way of referees and examining physicians, in order to examine and pass upon cases in full fairness to the injured employee, the employer, or the insurance carrier. The evidence before us indicates that in some cases, owing to the pressure of business or the limited time available for the work of the State Physicians, the physical examinations are not as thorough as they should be. A criticism has also been made of the practice of notifying claimants, employers, insurance carriers and other interests in a large number of cases to appear at the Bureau at a stated hour in the morning, and that by reason of the large number of cases set down for a particular time, and the length of time necessary to get through the list, the time of the interested parties is largely wasted in waiting to be heard. This seems to us to result partly from the lack of sufficient personnel, as above indicated, as well as from the practice of assigning more (too many) cases for hearing at a stated hour in the morning instead of being scheduled for different hours during the day. It seems to be the consensus of opinion, and we so find and report, that at least 2 additional referees should be appointed and that the medical staff should be enlarged correspondingly.

As to the medical staff, we have had additional criticisms to the effect that certain physicians employed by the Rehabilitation Clinic, have also at various times become interested in compensation cases either on behalf of an injured workman or in behalf of an employer or insurance carrier. It is our belief that the physicians employed by the state should be prohibited from engaging in such practice. It has been suggested that the work of the Bureau would be expedited and rendered more effective by the employment of a physician or physicians on a full-time basis, at an adequate salary, and we have been advised that a competent physician can be obtained, whose full time could be given to the examination of cases coming before the Bureau, at an adequate salary. We do not doubt that if such a physician were employed and would attend at the Bureau every weekday for the purpose of making examinations, and that such physician be precluded from engaging in practice on behalf of any injured workman, employer or insurance company, that the work of the Bureau and its results would be materially enhanced. The Commissioner of Labor should also be authorized to engage as many as 3 independent physicians to make examinations and advise the Deputy Commissioners of any important case where it appears to the Deputy Commissioners that the testimony of the physicians obtained by the parties is in irreconcilable conflict.

There seems to be also a very strong sentiment among the majority having contact with the Workmen's Compensation Bureau, that in no case should a case be set down for a formal hearing until the matter has been examined into at an informal hearing, and a recommendation made there-

in by the Referee or Deputy Commissioner, so that the parties involved may have the opportunity of speedily settling or adjusting these cases if they so desire. It has been urged upon our attention that there have been many cases which could be informally adjusted by a Referee without delay and to the entire satisfaction of all parties concerned, but that owing to the intervention of certain lawyers and doctors whose chief interests seem to be in obtaining the allowance of fees, these cases are not permitted to be informally adjudicated by a referee but are set down for a formal trial. This practice necessarily suspends and delays the payment of compensation when it is most needed, and in the long run seems to work more to the benefit of the doctors and lawyers who become interested in cases rather than to the claimants themselves.

We, therefore, believe it would be in public interest that in these cases the claimant should at the earliest possible date report to the Bureau for a physical examination, and that at such time claimant should be examined by a Referee as to the time and place and circumstances of the accident and extent of the injury, and the present condition of the claimant stated, and duly recorded with the recommendations of the Referee, and a docket, file or other record kept for that purpose.

It has also been suggested and we recommend that, if at places like Newark, Jersey City, Paterson, Camden or wherever a large amount of work falls on the attending referee or examining doctor, he be provided with a stenographer to make a record of the facts elicited instead of the long-hand method now in use, and that such record be made a permanent file, and that such file should in all cases be made part of the cases to be submitted to the Deputy Commissioner on final hearing. The procedure in practice in Jersey City appeals to us as that which should be adopted generally.

We have had considerable evidence indicating that the practice before the Bureau on the part of certain attorneys and physicians is becoming commercialized; that there is a certain amount of "ambulance chasing" on the part of the doctors, lawyers and runners, and that this practice is carried on in the quarters of the Department of Labor, and this charge has been made with respect to cases which, although being satisfactorily handled by the referees, might be made the occasion of obtaining professional fees by throwing the matter into a formal hearing.

Another matter with reference to which we have had considerable criticism, is the practice of State physicians recommending to the Referee and Deputy Commissioner the allowance of some arbitrary percentage for assumed permanent disability, in cases where there has been or is indicated a complete recovery from a temporary disability. Doubtless there are cases of fracture followed by a complete union which may cause future recurring pain or disability, but we do not believe that the letter or spirit of the Workmen's Compensation Act justifies general allowance of permanent disability percentage where the injury is of a temporary nature.

Much criticism has also been expressed before us in the matter of making allowances for attorneys fees and medical fees. The statute authorizes in contested cases the allowance of attorney fees not exceeding 20% of the amount of the judgment except in cases where compensation has already been paid, in which event the attorney's fee is based upon the excess compensation

awarded on the final hearing. The criticism in this connection is that some of the deputy commissioners have in the past frequently awarded the full 20% of the judgment or of the excess, as the case may be, without recognizing that the amount suggested by the statute is a maximum amount and not an arbitrary percentage to be applied in all cases. The same criticism is directed to the allowance for medical fees. The statute directs an allowance of a maximum of \$50 to any one physician, not exceeding \$150 in any one case, and it has been stated that, as to these allowances also, the practice of the deputy commissioners is to allow \$50 to each physician, notwithstanding that the same physician may appear in 3 or 4 cases before the same deputy commissioner on the same day. We believe that if the design and purpose of the law were kept in mind by the deputy commissioners, and the legal and medical fees based on the actual work done, it would discourage to a great extent the apparently growing practice of commercializing compensation cases by doctors and lawyers.

Requests have been made, in which we concur, that the rules of the Bureau be amended to provide for 5 days' notice to both parties of the dates of informal hearings, and that the time for filing an answer to a formal petition be extended to 20 days instead of 10 days after service of the petition or bill of particulars.

It has been called to our attention that frequently a case is repeatedly set down for hearing, and the petitioner does not appear or notify the Bureau in advance of the fact that he will not appear. This may be due partly to the fact that the petitioner's address does not properly appear in the records or that the petitioner may have moved from the address given at the time of the injury, and it is suggested, and we concur in the recommendation, that where a case has been set down for hearing, and ample notice is given to the petitioner, and the petitioner does not appear, such case should not be again assigned for hearing except on the request of the petitioner. We also concur in the suggestion that in every case either the employer or insurance carrier be authorized to accept and endorse acknowledgment of service of petitions, as this is a common method used in civil suits of law.

We have given consideration to numerous suggested amendments to the Act, many of which seem to be desirable, particularly the following:

Repeal the provision relating to penalty for failure to file accident reports, and extend the period of limitation in which petitions may be filed to 2 years. Also to extend the time for filing a petition by a widow or other dependents until 1 year after the date of death of the injured.

That all nonresident employers engaged in work and hiring labor within the state of New Jersey should be required to provide security for any liability they may incur in New Jersey under our Workmen's Compensation Act, or, that the service of process upon the Secretary of State be made a valid method of service in all cases where nonresident employers cannot otherwise be served.

To abolish the appeal to the Common Pleas Court and provide for review by writ of certiorari in the Supreme Court.

Amend the hernia section of the Act so as to provide for a 48 hour notice whenever an accident occurs on a day preceding a Sunday or legal holiday.

Substitute for Section 23F a new Act providing that the employer or insurance carrier may in-

stitute an action against third persons in the event that the injured employee refuses or neglects to institute such action within a limited time.

While it might be desirable to make a number of other changes in the laws, we do not believe that further amendments of the statutes should be attempted. We urgently recommend, however, that the entire body of the Workmen's Compensation Laws should be entirely revised. The act of 1911 has been amended 15 times, and the supplement of 1918 has been amended 7 times, and other supplementary acts have been passed, so that the law as a whole is now in a state of confusion, and in many instances of inconsistency. In our judgment, it is impossible to adequately amend the law so as to provide an harmonious, understandable and workable code covering the matter of workmen's compensation. The whole matter should be revised, modified and clarified to afford a better understanding and proper administration of the law.

In conclusion, we would like to take the opportunity to express our commendation to the Commissioner of Labor, as well as to the personnel of the Bureau, for the satisfactory manner in which most of its affairs are being conducted. Notwithstanding the criticisms offered in the foregoing pages, we find that everyone in the Bureau is making a conscientious and determined effort to better the general efficiency. As a matter of fact, noticeable improvement has been made, in our opinion, during the past 8 months while the Commission was functioning. We wish to express our thanks officially, also, for the coöperation of the Deputy Commissioners and Referees, whose comments and explanations have been very helpful.

Respectfully submitted,

Thomas B. Eames  
Maximilian M. Stallman  
W. S. Landes  
J. B. Morrison, M.D.  
A. Duncan Reid.

## School Health Department

### NOTES FROM LOS ANGELES

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton.

The Los Angeles school system has won deserved fame for its health and physical education program. From its last annual report the following excerpts have been taken.

*Importance of exclusion.* "It has been discovered by experience that it is much better to exclude a number of pupils for 1 day or 2 with minor ailments, than to allow 1 child with suspicious symptoms to attend school until a positive diagnosis of communicable disease can be made. This is especially important in view of the fact that measles and scarlet fever, for instance, are more contagious for several days before the diagnosis is usually made. The exclusion of every child from school who suffers from an acute cold has reduced the number of cases of influenza, pneumonia, measles, whooping-cough, mumps, meningitis, diphtheria, scarlet fever, septic sore throat, and bronchitis. Most of our communicable diseases begin with symptoms simulating the common cold. By control of acute colds among school children, we have gone a long way toward aborting most of our epidemics. These symptoms are very easily



detected by the teachers, and they have been instructed to exclude all such children."

**Keeping schools open.** "It has been agreed among health officers that a properly inspected school room is the safest place for a child during the outbreak of an epidemic. By school inspection, the children acutely infected are excluded and thus separated from the other children, at the same time reducing the number of contacts."

#### THE SCHOOL PHYSICIAN

The following is an excerpt from an article by Dr. John L. Goffin in the March, 1930, issue of *School Life*. Dr. Goffin is Assistant Health Supervisor of the Los Angeles Schools.

"This situation points unmistakably to the necessity of special training for school physicians, both medically and educationally. Authorities in school health work are now pretty generally agreed that the prospective school physician needs special instruction in pediatrics, orthopedics, sanitation, contagious-disease control, and in the principles of health education and the organization and administration of health education. There is also a growing feeling that the school physician should be a full-time worker, who enters school health work as a specialty with the idea of advancing himself steadily and making it his life work. If we are to make school health work a dignified and useful profession, we must provide professional and economic incentives. Professionally, the school physician must be assured a steady and progressive growth; economically, he must be rewarded commensurately with his knowledge and skill. I can see no valid reason why the specialty of school health can not be made as attractive professionally as any other specialty in medicine. As at present organized, a very large amount of routine work is required and too little time is allowed for research. There is very little opportunity for keeping children under close observation for long periods. There is practically no opportunity for treatment in the medical sense."

#### MINIMUM STANDARD

This resolution was adopted by the American Public Health Association and the American Association of School Physicians.

*Whereas* school physicians as a class have not heretofore been adequately prepared for the work which our complex educational systems now demand, and

*Whereas* school physicians have not heretofore been paid a salary sufficient to justify this additional training, and enable them to devote their full time and best efforts to this work, and

*Whereas* it has become necessary to take definite steps to improve this situation, therefore, be it

*Resolved*, That the American Public Health Association and the American Association of School Physicians, in convention assembled, do recommend consideration of, and action upon, by the various states, the following minimum requirements for new school physician applicants:

(1) Graduation from an acceptable medical school, 1 year of acceptable internship, and a license to practice medicine in the state.

(2) Six semester hours of graduate training in medical subjects relating to school health work.

(3) Six semester hours in a school of education of work embodying the principles of health education, and the organization and administration of same.

(4) This 12 hours of graduate work must be

completed within 3 years after certification by the State Board of Education.

And that they further recommend:

(1) The establishment of a salary rating equivalent to that now granted the high school principals in their respective localities.

(2) That this salary be subject to automatic increase according to length of service.

(3) And that it be subject, also, to an increase commensurate with educational merit and progressive professional development.

## Communications

### ONE REASON WHY PATENT MEDICINE VENDORS THRIVE

(Parody upon a Hospital Staff Meeting, submitted by one of our members who vouches for the truth of the essentials and declares this actually happened in one of New Jersey's large cities.)

A type-written card came to Dr. Deutsch's office: Consultation—meeting at the General Hospital on Tuesday, February 17, at 9 p. m. Subject: Obscure conditions of the liver.

These consultation-meetings were held once a month in accordance with the regulations of the College of Surgeons.

Primarily, they were held to discuss cases treated in the hospital in which a fatal ending had not been averted.

But even the doctors do not like to hear of death more than they have to—so, in our hospital the Committee on Program was obliging and tried to offer something of interest to nearly everybody.

The evening of the seventeenth of February was given over by the chairman to a doctor who presented 4 patients, all males, whom he, to the best of his ability, had cared for until such time as surgical intervention seemed the only way out. In his zeal to make the evening attractive he had asked all 4 men whose cases were to be discussed to be present at 9 o'clock to show that they were very much alive.

The doctor exhibiting these patients was of the antediluvian type; he still sported the mustache and goatee so popular a quarter of a century ago, and it was only recently that he had changed from an open-air horse-drawn vehicle to a closed automobile—a Ford. He still prescribed Lloyd's Specifics, Echinacea, and other remedies of which he did not know the composition; but he could tell stories entertainingly, and all grandmothers liked him because he never "queered" them in their use of poultices or home-remedies.

He had easy-going manners and a laugh resembling the exuberance of a goat.

He was a strictly *medical man*, not a surgeon.

Dr. Pushemover, whom he had asked to operate on his patients, was also present.

Dr. Goatee opened the meeting: "Gentlemen, we have here present with us 4 patients who have been operated on in this hospital. The first, Mr. Hiram Bunk, was here—let me see—was it in 1928—that's right?" "Yes", said Mr. Bunk, "I was operated on June 21, 1928."

"And are you entirely well", asked the doctor.

"I was never better in my life", answered Mr. Bunk.

"Gentlemen", spoke the goateed doctor, "to-night Mr. Bunk is celebrating the twenty-fifth anniversary of his wedding to one wife and I think, on a

day like this, we ought to excuse him." Exit Mr. Bunk.

The second victim of surgery was then presented. He, too, stated that he was well—and so did the third and fourth patients. They were excused and allowed to depart.

Now came the interesting part of the evening—discussion of the state of the livers of these patients who had really never been made acquainted with what ailed them. Dr. Goatee read all the data from the charts—it took him a long time to search through the records to find what he wanted but at last, with infinite patience, he was able to tell the audience what, in his opinion, each patient was *not* suffering from.

One of the men, Mr. Liverwell, had been sick quite some time with fever and jaundice; there was no end to the fever and notwithstanding the quinin and the Lloyd's Specific's given to him, the man did not improve.

Dr. Goatee decided to call a consultant. This eminent doctor, living in New York City, would condescend to come to our town for \$500. That was too much. Another consultant telephoned to say he would come out for \$100. His fee was agreed to.

After examination, this New York specialist said: "Do you know what you have there? An abscess of the liver. You'll have to take him to the operating room."

"If the man is willing, will you operate on him?" asked Dr. Goatee.

"Certainly", replied the consultant, "but that will be \$150 extra."

The man was willing. The consultant opened the abdomen, saw nothing abnormal with the liver, and proceeded to pierce that organ with long needles in direction perpendicular, oblique and transverse, but no pus was found. The operator finally gave it up as a bad job and closed the abdomen. The patient's temperature after operation remained the same as before—around 101° in the morning and 103° in the afternoon—but after some 4 weeks or more the temperature dropped to normal and gradually the man got well.

Mr. Bunk's case excited the most interest. After nearly a year's ailment, with lack of appetite and a slight pain over the liver region, he developed a fever which arose sometimes to 104°. Dr. Goatee, who saw that the man was jaundiced, thought that he was possibly suffering from gall-stones, and with this idea in mind he called in Dr. Pushemover who agreed with him and suggested an operation.

At operation the gall-bladder was opened but no stones were found. The liver was enlarged about 2 finger-breadths; there was no tumor, but some peculiar spots, white, and of the size of a pin-head, were present on the liver's surface.

Dr. Pushemover, who was a protégé of the Hospital's Board of Governors, perhaps wasn't quite as experienced in dealing with livers as he should have been. He had never seen a liver with spots like those of his patient. He therefore called them *cancer*—which was a risky thing to do because time would ultimately prove him right or wrong. Anyway, it was then declared to be cancer and the patient was sewed up and put back to bed.

The fever continued as before but, strange to say, Mr. Bunk recovered in about 8 weeks notwithstanding the operation. His disease condition had been called *cancer*, and the family had been told. A drowning man catches at straws, and this patient, made aware of his condition, wrote to Muscatine, Iowa, for information regarding a certain Cancer Specialist.

The most interesting part of the meeting was now to begin. Dr. Goatee had presented his cases—all 4 patients had come to operation but the operations had not cured them—all 4 had continued to have high temperatures for weeks until at last nature, or their own resistance powers, had put them back on their feet.

The Chairman of the meeting announced that the report was open for discussion.

A surgeon of the staff asked whether a piece of liver tissue had been removed for examination, from the man who was supposed to have had cancer.

"No", answered Dr. Pushemover.

"Why, then, was the condition diagnosed as cancer?"—asked the Staff Surgeon.

"We supposed that those white spots on the surface of the liver were metastases from cancer in some other parts, but evidently we were wrong."

Another doctor spoke up and said that he could not understand how a diagnosis of cancer could have been made if the temperature curve had been taken into consideration—he had never seen a cancer of the liver exhibit that particular curve, which looked more like a septic temperature record than anything else.

Another man arose and said: "I am very glad that this case of supposed cancer has come up for discussion. I have often wondered if this man Bunk, whom everybody in this town seems to know, really had a tumor or a cancer at the time of his operation. The facts of the case have now come to light. Whenever I see a case of cancer, in my practice, someone invariably mentions Hiram Bunk who, as the whole town is told, 'has been cured of cancer by taking patent medicine after the doctors who had operated on him, had given him up to die'. I am, and always have been, thoroughly disgusted when hearing the praises of this patent medicine, knowing well enough that no such medicine has ever yet cured real cancer. I listen to the talk of superstitious gullible people, but it is a conundrum to me how a certain doctor on the staff of this hospital, and who is also a member of the American Medical Association, can be so naïve as to advocate use of that patent-medicine because it is said to have cured Mr. Bunk. What is more, there is also a nurse in this hospital who recommends this medicine to all victims within her reach.

And now, I will read to you, from the Cancer Specific booklet, Mr. Bunk's testimonial.

To whom it may concern:

I was operated upon on June 21, 1928, for a gall-bladder condition but the surgeon found an advanced cancer of the liver. After the shock of the operation had passed, I started to take your Cancer Specific and have continued it right along. I now feel better than I have for years. All signs and symptoms of the condition seem to have passed away. Hardly a week goes by but what I have 2 or 3 inquiries about your medicine and I heartily recommend it to all.

Yours very truly,

Hiram Bunk."

Dr. Pushemover made himself as small as possible. He was evidently embarrassed. Bunk's cancer medicine sold like hot cakes in the town, because of the living testimonial walking the streets "after 2 able doctors had condemned him to die of cancer".

Another man got up and said: "Not only does a doctor recommend this medicine but we have in our midst a minister of the gospel who thinks he is very close to our heavenly father—and he, too,



'knows that Bunk has been cured by the Cancer Specific' and he tells all the members of his congregation that it is foolish to call in a doctor in any case of cancer."

On motion, the meeting was adjourned and the refreshments brought in.

The refreshments consisted of coffee, diminutive sandwiches and heavy slices of ice-cream with cream-puffs, lady-fingers and chocolate-coated sweet things.

"How can you sleep?" asked the President of the Staff of Dr. Deutsch, "after a cup of strong coffee?"

"I am a Dutchman," said Dr. Deutsch, "I am a drinker, but not an eater—for instance, I don't eat ice-cream—I don't touch those dou-dahs in which you are so interested, but I like my cup of coffee."

### FIRST COUNCILOR DISTRICT MEETING

(A letter from Dr. S. Rubinow, of Newark, offering suggestions of value to committees arranging for meetings at which economic problems are to be discussed.)

To the Editor: The February meeting of the Essex County Medical Society, a joint meeting with 4 other county societies, was devoted to medical economics. It was, we believe, arranged at the suggestion of the Conference of County Secretaries, which rightfully considers this topic at the present time of the utmost importance to the profession. Nearly every leading man in state and national medical organizations is aware of the grave problems facing the profession and is deploring the indifference of its members to these problems. The object of these meetings is to overcome this indifference, to arouse the profession's interest and to create a unanimous, strong, medical opinion and a definite attitude toward the issues involved.

From this point of view one is compelled to say frankly that the above mentioned meeting did not fully accomplish its purpose. To begin with, the meeting was not sufficiently advertised to assure a large attendance. The presence of a number of members from the other counties somewhat saved the situation but even so the attendance was poor. The addresses were excellent, though somewhat too long, too academic. What is to be regretted most, is the fact that the members at large were not at all encouraged and hardly given an opportunity to participate in the discussion, very likely on account of the late hour. A few officers of the state and county societies were called upon for discussion, but one is of the opinion that these members have other opportunities for expressing their views.

The writer of these lines believes that such a meeting, if its importance is sincerely felt, should have been conducted in 2 sessions, 1 devoted exclusively to discussion. The meeting was held on Lincoln Day and an afternoon and evening session could have been arranged with a dinner between. The meeting could have been advertised more efficiently by announcements at all preceding medical meetings, by placing reminders on the boards of all the hospitals; by postal cards on the day of meeting, and so forth.

These remarks are written with no intent of

fault finding, and solely with the desire to be helpful to other county societies, which may contemplate similar meetings.

### ACTIVE IMMUNIZATION AGAINST MEASLES

(Letter from Dr. Felix Baum, of Newark)

The article of Dr. Piller in the April number of this Journal reminds me of an experiment in my own family which might be of practical interest.

In April 1918, my second son developed measles at the age of 3 years. In order to protect my older son, 6 years old, who had just entered school, I vaccinated him on the inner surface of the right fore-arm in the usual way, making a few scratches superficially and rubbing in a drop of nasal secretion from the nostrils of the sick child. Vaccination of the healthy boy took place at the bedside of the patient during the stage of eruption.

I watched the fore-arm of the older boy, who attended school and slept in the same room with his brother. A few days after the vaccination I noticed a slight redness and a soft movable mass, not larger than a cherry, just under the skin of the fore-arm, which disappeared after about 5 days. There was no fever nor pain. The boy continued at school without showing any signs of measles. During the epidemic in the same month the entire class of which my boy was a member developed measles but he stayed well and remains immunized until today, though he is 19 years old and has been exposed to measles repeatedly. How long the immunity will last I do not know. In looking over the literature, I find that numerous attempts have been made to immunize children actively against measles. Herrman (Arch. Pediat., 39:607) took the nasal mucous discharge of patients before appearance of the eruption, mixed it with saline solution, centrifuged the mixture, added tricresol as a preservative, and applied a few drops to the nasal mucous membrane of 4 to 5 months' old infants to be immunized. It seems to me more logical to use the skin, the organ of protection, as the site of inoculation. Moreover, direct vaccination with the virus, unchanged by chemical or mechanical means, seems preferable because we know that the virus is very sensitive and can be transmitted only by direct contact.

I admit that 1 case does not prove anything, but it indicates that an artificial, localized skin infection with measles probably is harmless and deserves further study in a large number of cases.

### ERRORS IN "OFFICIAL LIST"

(Letter from Dr. J. B. Morrison, Secretary of the Medical Society of New Jersey.)

Hofer, C. J. M., of Metuchen, is alive and in good standing. The deceased physician, Dr. Clarence A. Hofer, was also a resident of Metuchen, hence the mistake.

Through a printer's error, an asterisk was placed before the name of Dr. Francis E. Proctor, of Trenton.

Dr. Frank C. Johnson, of New Brunswick, wishes to have reference made to the fact that he has an office in New Brunswick and also one in Elizabeth.

## Woman's Auxiliary

### WOMEN AT THE A. M. A. PHILADELPHIA JUNE 8-12, MEETING

(Submitted by Mrs. Walter Jackson Freeman)

The Woman's Auxiliary to the American Medical Association has been placed in charge of all entertainment of women visitors, and began its labors on June 27, 1930, by engaging the whole Roof Garden of the Bellevue-Stratford Hotel for the period of the Convention. All women's activities will center in this hotel—registration, meetings, luncheons and supper dance, and all excursions will start from the Broad Street entrance. Invitations and tickets must all be procured in the Roof Garden *in advance*, as nothing but programs will be obtainable elsewhere. Members of the A. M. A. are invited to join all excursions, and should register for them in advance. Rooms for State Headquarters have also been reserved in the hotel, and sponsors will be appointed to look after all women registered from their own states. The list of sponsors will be printed in the program. The Chairman of the Women's Hotel Committee is Mrs. Frederick S. Baldi, 2117 Porter Street, Philadelphia, who will be glad to make any desired reservations.

The Convention will open with a subscription buffet luncheon in honor of all National Auxiliary Presidents from Mrs. Red to Mrs. McGlothlan, immediately followed by 3 "round tables" of 35 minutes each, with 10 minutes intermissions, each under expert leadership. The subjects will be:

- (1) Programs for County Auxiliary Meetings.
- (2) Technic and Value of a Committee on Public Relations.
- (3) History and Archives.

These informal gatherings will be a sort of preliminary canter, designed to bring together those interested in special phases of auxiliary work and give them opportunity to discuss the subject thoroughly during the following days. The National Board Dinner and Pre-Convention Meeting are scheduled for Monday evening.

A new and, we hope, helpful feature will be a Question and Suggestion Box to which we beg all with good ideas to contribute. This seems the most practical way of finding out what our members want continued, what discarded, and what plans are indicated for the future.

The regular business session will be held on Tuesday and Wednesday mornings. National chairmen will be allowed 10 minutes for their reports, State Presidents 3 minutes. Reports to be printed may be as long as desired (within reason), but let no one reporting on the floor imagine these limits an idle jest. Nor will the hours announced on the program be found to mean "about". Have your watches cleaned and regulated, and practice your wrist drill before leaving home. You will need it.

Thursday morning, too, will be a busy one, the post-convention Board meeting, a special meeting for State and County Treasurers desiring further elucidation of the treasurer's receipt blanks, and at 10.30 an informal round table presided over by the new president: the subject, "What Have I Gotten Out of the Convention?" At this meeting Mrs. McGlothlan will announce her committee chairmen and outline her plans for the coming year, and the subjects in the Question Box will be discussed, a sort of stock taking, closing the year's business and opening the new books.

Philadelphia, as an historic and culture center,

is the key-note of the entertainment planned for our guests. Except Monday, all afternoon and evenings will be devoted to pleasure, and a variety of excursions is offered to suit all tastes, all physiques, and all weathers. They include bus trips to Valley Forge and to Longwood, the beautiful estate of Mr. and Mrs. Pierre S. du Pont; a boat trip on the Delaware, and visits to the Fairmount and Rodin Museums and to the Historical Society of Pennsylvania. The Museum authorities are delighted to provide decent service for those desirous of more than a passing glance at their treasures, and the Historical Society will arrange a special exhibition for the week—including portraits, prints, engravings, documents, silver, etc.—from its unsurpassed collection of Americana. There will also be a brief history address by Dr. Charles W. Burr, of Philadelphia.

Wednesday will be a field day, the big auxiliary luncheon, with guests and speakers from the A. M. A., and a beautiful musical program, the gift of the Delaware Auxiliary. In the afternoon, the Philadelphia County Medical Society will invite the women to be guests on a bus trip through historic Philadelphia (a 10 minute's stop at Independence Hall), Fairmount Park and Germantown to "Stenton", where the New Jersey Auxiliary invites us all to tea. "Stenton", the home of James Logan, Penn's friend, Secretary of the Colony, still stands just as it was built in 1728, with furniture of the period, and garden laid out as described by contemporaries. On Wednesday evening, the Pennsylvania Auxiliary invites all visiting ladies to a reception in the superb Chinese Rotunda of the University Museum, a setting probably unsurpassed in any museum anywhere.

This meeting of the A. M. A. is the first in Philadelphia in 30 years, and the county medical society, desiring to mark so auspicious an occasion, and also in appreciation of the work of the auxiliary, invites all members of the A. M. A. and the visiting ladies to be its guests at a supper dance in the Ball Room of the Bellevue, following the big meeting of the A. M. A. on Tuesday evening at the Academy of Music. The President's ball at the Benjamin Franklin Hotel on Thursday evening, to which all are invited, will close the formal festivities.

To those still able to rise from their beds on Friday morning there are offered a tour of Wanamaker's with luncheon in the Crystal Tea Room; or an all-day bus trip to Atlantic City, where the New Jersey Auxiliary will meet them for luncheon at the Claridge. This Atlantic City program includes also a visit to the new Convention Hall, an hour in a chair on the boardwalk, and plenty of time for window shopping or a swim.

And finally, every day and all day there will be a booth in the Roof Garden inscribed "As You Like It"—where those wishing to golf, shop, go to Garden Days, or carry out any other pet project not elsewhere provided for, may find information and assistance in making a profitable use of their opportunity.

Will you not reward our efforts by the largest and most enthusiastic woman's attendance in the history of the American Medical Association?

### EXECUTIVE BOARD MEETING

Reported by Mrs. W. Blair Stewart.

The Executive Board of the Woman's Auxiliary to the Medical Society of New Jersey met at the Stacy-Trent Hotel, Trenton. Prior to the business meeting a luncheon was served which added to the general friendliness of the occasion.



The program for the State Auxiliary meeting at the Berkeley-Carteret Hotel in Asbury Park, June 3-5, was read and discussed, and the proposed revision of By-Laws read and discussed.

Those attending were: Mrs. John Nevin, President; Mrs. H. Roy Van Ness, President-Elect; and Mrs. Dan S. Renner, Mrs. Edward Clarke, Mrs. A. Haines Lippincott, Mrs. George Orton, Mrs. Theodore Teimer, Mrs. William Freile, Mrs. John F. Hagerty, Mrs. H. H. V. Hubbard, Mrs. W. C. Raughley, Mrs. Emanuel Newman, Mrs. George N. J. Sommer, Mrs. W. Blair Stewart. The guests were treasurers or secretaries from the various county auxiliaries.

### Gloucester County

Reported by Mrs. Henry B. Diverty

The regular meeting of the Woman's Auxiliary to the Gloucester County Medical Society was held at the Woodbury Country Club on Thursday, April 16, at 9 p. m. The president, Mrs. Elwood Downs, was in the chair and the membership was well represented. Mrs. D. Miller, of Millville, was a guest.

After disposing of the regular business, Mrs. Downs read the wonderful program for the entertainment of Auxiliaries attending the American Medical Association convention to be held in Philadelphia June 8 to 12. This program was arranged by Mrs. Walter Jackson Freeman, who knows Philadelphia and knows women, and the best Philadelphia has for a sight-seeing trip of 3 days is on this program. Social functions as well. Headquarters for Auxiliary members will be at the Bellevue-Stratford Hotel, where 2 rooms will be at their service for the entire time—gratis.

If it is your privilege to belong to the Auxiliary of Gloucester County Medical Society, don't miss it.

Professor Beardsley, who had addressed the doctors in an adjoining room, was presented to us and other visiting delegates.

After a short social session we were invited into the dining room where a fine collation was served by the Country Club chef.

### Hudson County

Reported by Miss Anne Hetherington

The Woman's Auxiliary to the Hudson County Medical Society met March 27 in the Jersey City Y. W. C. A., with Mrs. John Nevin presiding.

A Nominating Committee for the coming election was appointed: Mrs. J. S. McDede, chairman; assisted by Mrs. W. Duckett, Mrs. P. Maras, Mrs. A. Ruoff. Delegates to the State Medical Auxiliary Convention at Asbury Park in June are: Mrs. H. Klaus, Mrs. W. Duckett, Mrs. S. Barishaw, with Mrs. Freile, Mrs. F. Nicholson and Miss Anne Hetherington as alternates.

After the business meeting the Auxiliary was addressed by Mr. J. Coleman, Secretary of the Jersey City Health Council, whose subject was "New Developments in the Field of Tuberculosis".

The Hudson County and Jersey City Boards of Health are distributing pamphlets on tuberculosis in the schools, stressing early diagnosis and preventive hygiene to the older boys and girls. They

have tried to make this literature as appealing as possible to arrest the attention of the young. Some pages are given to items of varied interest with an occasional biographic sketch. In the last issue appears the Life of Laennec, inventor of the stethoscope.

Mr. Coleman cited many of the causes of tuberculosis, among them being the scanty dress of the modern girl; industrial occupations; crowded living conditions; but declared malnutrition, induced by Hollywood diets and the craze for slenderness, to be the most fertile source of the disease. Fortunately, this destroyer of the young, even in its advanced stages, responds to nutritional therapy.

Tuberculosis is found in varying degrees among different races; the lowest death rate is held by the Jewish people, who have developed an immunity to this disease which is offset by a proneness to nephritis and diabetes. The Italian death rate is the next lowest; the highest is suffered by the Irish and colored races. In his native south, the negro shows comparative freedom from this disease, but transplanted to other cities, he becomes easy prey. The health boards intend to make great efforts to educate the negro in preventive measures. After Mr. Coleman's address an open discussion was held.

Tea and the usual social hour followed.

### Hunterdon County

Reported by Mrs. J. D. K. Tompkins

The spring meeting of the Woman's Auxiliary to the Hunterdon County Medical Society was held at the home of the President, Mrs. F. A. Thomas, in Flemington, on Tuesday, April 21. Following the meeting a delicious luncheon was served by the hostess.

### Union County

Reported by Mrs. C. A. Hoffman

The regular quarterly meeting of the Woman's Auxiliary to the Union County Medical Society was held in the Nurses' Home of the Elizabeth General Hospital, Elizabeth, on April 8, with Mrs. Hubbard presiding. There were 24 members present. Minutes of the previous meeting were read and approved.

Mrs. McElhinney, Treasurer, reported a balance on hand of \$35.36. Monthly reports were called for. Delegates were appointed to the American Medical Association Convention to be held in Philadelphia the first week in June: Mrs. Harry V. Hubbard, of Plainfield, and Mrs. G. S. Laird, of Westfield; Alternates, Mrs. H. D. Corbusier, of Plainfield, and Mrs. F. A. Kinch, of Westfield.

Mrs. John Nevin, of Jersey City, President of the Woman's Auxiliary to the State Society, was present and gave a review of a book by Gertrude Atherton, "The Conqueror", and also commented upon other authors, including Sinclair Lewis and Booth Tarkington.

An interesting address on "How to Make a Small Garden" was given by Mrs. R. A. Shirrefs, of Elizabeth.

A door prize was given, and was won by Mrs. De Cesar, of Bozelle Park.

A delightful afternoon at cards, following lunch-

eon, was enjoyed by more than 20 members at the Clare Louise Tea Shop, in Plainfield, on March 16. Members were present from Elizabeth, Westfield, Cranford, Rahway and Plainfield. Four prizes were awarded, the first going to Mrs. G. S. Laird, of Westfield. The door prize was won by Mrs. F. A. Kinch, of Westfield.

## County Society Reports

### ATLANTIC COUNTY

#### Fifth Councilor District, Medical Society of New Jersey

John Irvin, M.D., Reporter

The third annual meeting of the Fifth Councilor District of the Medical Society of New Jersey, comprising Atlantic, Cape May, Cumberland, Gloucester and Salem Counties, was held in Atlantic City April 10, with Dr. Joseph H. Marcus acting as chairman. Dr. Marcus welcomed members and guests from the other counties, and went on to explain the purpose of the meeting. Extension of the Councilor District meeting plan to the entire state was proposed at the November meeting of County Society Secretaries and Reporters. The purpose is in part to discuss the economics of medicine and state medicine in order to inform our members what is going on and in order to keep them in touch with ever-changing conditions. So, it is my very great pleasure to introduce Dr. Hartwell, who is President of the New York Academy of Medicine, and whose topic will be "The Continued Education of the Doctor". (To be published in the June Journal.)

*Dr. Marcus:* Dr. Hartwell has presented to you facts that have been gathered from years of experience. Our next speaker brings with him a wealth of experience, from a clinical as well as an institutional point of view. He is a clinician of note in Philadelphia and it is my great pleasure to introduce Dr. Joseph C. Doane, Medical Director, Jewish Hospital, Philadelphia, who will speak on the subject: "What the Public Thinks of Present Day Practice of Medicine."

*Dr. Doane:* It goes without saying that I consider myself able to speak about the current problem that is confronting the medical profession. If I am a trifle vitriolic, a trifle caustic, in regard to our own profession, let me say it isn't time for platitudes when one is trying to find out who is muddying the water. One can hardly go into a Pullman car without hearing someone relate some unpleasant experience that a relative or friend has had at the hands of a physician. We are passing through a changing economic and political existence. Perhaps the doctor and society will have to have adjustments from the standpoint of financial relationships downward or upward to suit the needs of the individual. Certainly there is something in the water which is muddying it. Whether the fault lies with the patient or the physician it is hard to say, but we will have to purge our ranks of the unethical, the pretenders, those whose names may carry the M. D. but who do not have the welfare of the patient or the physician at heart. It seems to me that the profession must separate itself from those who are doing it harm, and the public cannot judge and will not

judge on generalities. The people desire to deal in specific instances. Medical Societies should assume a more militant leadership.

In Pittsburgh, for example, no Medical Director is appointed without approval of the medical society. In many other localities, where leadership is needed, rarely do they turn to the medical society for advice. The Philadelphia County Medical Society has been asked by 2 of the city's leading papers to censor all medical advertisements. Certain broadcasting stations have promised that all members advertising, whether it be about medical appliances, apparatus or anything to do with medicine, will be submitted for careful censoring by the local medical society. (Dr. Doane's paper will appear in the June Journal.)

At the close of the afternoon session all members and guests attended dinner in the hotel, at which the principal speaker and Guest of Honor was Dr. H. Sheridan Baketel, Professor of Hygiene in Long Island Medical College, and Editor of "Medical Economics". (Dr. Baketel's address to be published later in the Journal.)

In the evening a Clinical Session was held at the Atlantic City Hospital, where members of the staff exhibited patients and discussed a wide variety of disease conditions.

The attendance at this District Meeting was greater than in preceding years and was stated by Dr. Reik to be larger than the number reached at any other District Meeting in the state.

Among those present was Dr. George N. J. Sommer, President of the State Medical Society, who responded to a call from the chairman and delivered a short talk at the banquet table.

This meeting was considered in every way successful.

### BERGEN COUNTY

C. H. Littwin, M.D., Reporter

The regular meeting of Bergen County Medical Society was held April 14, at the Englewood Hospital, with Dr. Joseph Morrow presiding. The minutes of the last meeting, and also of the meeting of the executive committee, were read and approved.

Dr. Morrow announced the appointment of the Public Health Nursing Committee: Drs. Edward W. Clarke, Chairman; Payne, Pallen, Sarla, James and Knowles.

The membership application of Dr. Neil McL. Whittaker, of Hackensack, was read. The following were elected to membership: Drs. Thomas F. Reid, Joseph A. Rowe, William F. Fitzhugh, and A. Ivan Mader, Jr.

The Secretary announced the omission of Dr. Herman Trossbach's name from the program through an oversight. Dr. Trossbach attended the meeting of the American College of Physicians at Baltimore as the first member from Bergen County.

A communication from Wm. J. Ellis, Commissioner of Institutions and Agencies, urging attendance at the Child Welfare Conference in New Brunswick, was read.

Dr. Wolowitz announced the program for the Post-Graduate Course in Gynecology and Obstetrics, which is to be given at the Hackensack Hospital on Friday afternoons beginning May 1.

Mention was made that Dr. Levitas had given a



dinner before the meeting to the speaker of the evening and a number of his friends on the occasion of his 25th anniversary of practice in Bergen County. He was presented with a silver cocktail shaker by the Medical Board of Hackensack Hospital.

For the scientific program, Dr. Burton J. Lee, Professor of Surgery at Cornell University Medical School and Attending Surgeon at Memorial Hospital, spoke on the "Indications for Surgery or Irradiation in Treatment of Cancer"; illustrating his talk with lantern slides. As a member of the American College of Surgeons' Committee on Establishment of Cancer Clinics, Dr. Lee's particular plea was for establishment of a Cancer Clinic in Bergen County for earlier diagnosis and better treatment. Drs. Pallen, Levitas and A. W. Ward discussed the question, and on motion of Dr. Levitas the president was ordered to appoint a committee to consider the formation of such a clinic.

### CAMDEN COUNTY

Robert S. Gamon, M.D., Reporter

The regular monthly meeting of the Camden County Medical Society was held in the Camden City Dispensary on April 7, with Dr. W. J. Barrett presiding.

Dr. E. A. Y. Schellenger was sworn in as a member.

The Scientific Program was given by 5 members who are qualified oculists. Dr. Pierce Shope read an article on "Refraction and Health". An interesting paper was presented by Dr. A. T. Eaton on "Eye Grounds in Some Medical Diseases". This was illustrated with lantern slides. "Squint in Children and Its Effect in Later Life" was read, and illustrated by lantern slides, by Dr. W. G. Mengel. Dr. Shipman presented a paper entitled "Significance of a Red Eye; with Some Remarks on Glaucoma", using lantern slides to illustrate his remarks. "Some Common Conditions in Industrial Ophthalmology" was given by Dr. G. J. Dublin. Moving Pictures of Cataract Operations, taken by Dr. Frank Parker of Wills Eye Hospital, were also presented.

Each paper was well presented and received favorable comment from the members present.

### CUMBERLAND COUNTY

E. S. Corson, M.D., Reporter

Newcomb Hospital, Vineland, again opened its hospitable doors to the Cumberland County Medical Society, on April 14, when 2 distinguished physicians addressed the society, and a resolution was adopted advocating a county hospital for tuberculosis patients.

One of the first things was introducing new members: Drs. G. A. Davies, Elmer; Charles Cunningham and H. B. Walker, of Vineland; Charles B. Neal and Fred V. Ware, of Millville.

A resolution endorsing a movement of the County Committee of the American Legion, to petition the County Freeholders to provide a hospital for tuberculous patients, was passed. "The difficulty in securing places for these patients, the cost of transportation and visiting them, the delay in entering them until it is too late for a

cure, and the infection of associates, make it necessary to seriously consider taking care of our patients at home", it was stated.

Dr. Reba Lloyd, president, felicitated herself in a gracious manner on being able to present as guest speakers, 2 professors of her Alma Mater, the Women's Medical College of Philadelphia.

Dr. Catherine MacFarlane, Germantown, discussed "The Role of Focal Infections in Disease of the Urinary Tract". Focal infection is an outstanding discovery of American doctors. It is now readily determined that infected tonsils and teeth may cause infection of the kidneys and bladder. The findings in 100 cases clearly evidenced this statement. Several speakers gave personal illustrations of how cures of rheumatism, bladder disease and neuritis had promptly disappeared on removal of the causes as stated above.

Dr. J. Stewart Rodman, Philadelphia, traced the growth of the efforts to cure and prevent "Cancer of the Breast". The female breast, owing to its function, is more liable to become affected. A simple inflammation of the milk ducts may eventually end in cancer. Attention to this condition should be given at once. At present a 5 years' delay of fatal terminations has been secured in 50% of the cases operated on, and less loss of function has resulted than formerly. With the extensive investigation that is in progress, the discovery of a cure cannot long be delayed. He explained a modification of the Halsted operation, to prevent contraction of the scar. A vertical incision, a few inches from the insertion of the pectoral muscles is made, instead of carrying to the usual point.

### ESSEX COUNTY

E. LeRoy Wood, M.D., Reporter

Considerable attention was given to economic problems at the Essex County Medical Society meeting held Thursday evening, April 9, at the Academy of Medicine, Newark. The president, Dr. Henry C. Barkhorn, first called attention to an ethical and economic problem involving the relationship of one physician to another. There is great complaint by many doctors against physicians employed by insurance companies operating under the Workmen's Compensation Act. An injured workman places himself under the care of a doctor of his choice. Shortly, another doctor, employed or influenced by an insurance company, "lifts" the patient from the care of the first one. The idea was expressed that such conduct is just as unethical as the taking of other than compensation patients from another doctor. It was stated that while the patients may be influenced by insurance company agents to change from an outside physician to an insurance or company doctor, the latter is party to an unethical act, and such conduct was condemned by the society through passage of a resolution.

In the discussion, it was pointed out that conduct by a physician contrary to the ethical standards of the County Society might cause that physician to lose membership. As many hospitals and other organizations require County Society membership of staff members, the result of unethical conduct might be far reaching in its effects. Conduct contrary to code principles, by insurance doc-

tors, may cause them to take a place outside of organized medicine.

Dr. Barkhorn then introduced Dr. Linn Emerson, who read a paper entitled "Economic Philosophy for the Present Day Doctor".

Dr. James S. Plant, Director of the Essex County Juvenile Clinic, taking as his subject "The Essex County Juvenile Clinic and the Medical Profession", spoke as follows:

The Essex County Juvenile Clinic was organized in 1923 by the Board of Chosen Freeholders of Essex County. It is supported by that Board and is county-wide in its work.

It is not fair to judge the Clinic without knowing something of the philosophic trends which were back of its construction. There were at least 2 distinct movements of which this was a result. Beginning in 1900, with establishment of the Juvenile Court in Chicago under Judge Julian Mack, and flowering out of this in 1911 into establishment of the Psychiatric Clinic in conjunction with that Court, we have developed in the legal field the psychiatric point of view. Psychiatrists are physicians and if they are interested in conduct disorders (delinquencies, maladjustment, crime) they look upon such disorders as simply symptoms of some deeper trouble. The lawyer is always interested in the exact *degree* of delinquency or crime. We have in psychiatry assumed the attitude of wanting to know *why* a delinquency occurred, and this involves such a study of the patient and his environment as will show the delinquency to be just the natural outcome of fundamental stresses in the child's life.

An entirely different movement was running parallel with this in the field of mental disease. With the birth of modern psychiatry, in 1890, with the work of Pinel, there developed a group of better mental hospitals, but there was a growing conviction that such hospitals were simply treating end-results. Thus, when Beers, in 1906, popularized the notion of the understanding and prevention of mental difficulties he found the psychiatrists in a receptive mood. Here began the notion that we should try to understand people who were disturbed, before they became sufficiently disturbed to go into a mental hospital. This is not true prevention although it has often been called so. That is, there is no true prevention in simply trying to get a disease process just a little bit earlier than you had before. We have seen in the matter of physical disease the ultimate necessity (in *true* prevention) of ameliorating those environmental conditions which give rise to the disease. That is true prevention. We prevent typhoid by watching our water reservoirs and the cows at the dairies. We prevent tuberculosis by building better houses. I submit that we can only really prevent mental breakdown of one sort and another by an understanding and control of all those great cultural forces which give rise to such difficulties.

As I picture these social applications of psychiatry, may I draw your attention to an interesting correlated development in the field of biology. The biologist is today definitely accepting the cell and its environment as a continuum. In other words, it is more and more recognized even in the biologic field that individuality in the sense that we have thought of it in the past, does not exist; that there is such a set of reactions and interactions between the individual and his environment as makes it utterly impossible to think of them as in any sense separated. This gives you a picture of the philosophic basis.

The work is carried on in such way that after a youngster has been referred to us we try to make a thorough physical, psychologic, psychiatric and social study of him in an effort to find out why he got into his difficulty. Roughly, in about  $\frac{1}{2}$  of the children we find a physical source of difficulty that is primary; i.e., primary in the sense that it is the important causative factor. For instance, we have a truant who doesn't want to go to school because he can't sit still there. We find, even in our own county, that many times such a child has been given a seat in the front of the room facing the other children so that he will stop his everlasting wiggling. So, we often find chorea, bad tonsils, bad teeth, or constipation as the sole major source of the difficulty.

I should like in addition to call to your attention what I might term physical factors as "indirect" causes. I am referring to such matters as short stature, birth-marks, being "plain", unusually large stature in girls, and that sort of thing—where the physical difficulty is of itself not important but where it makes the child feel that he has much to compensate for because he has thus been set apart as different, odd and strange. Perhaps the most desperate criminal I have ever known was a boy who grew up as a "runt". He compensated for all of this feeling of inferiority by a series of amazing crimes.

In something like 30% of our cases mental defect in one form or another is a major factor. Here, of course, we have chiefly the inability on the part of the child to successfully meet the academic requirements of the school. One of the most interesting of problems arises out of the fact that as we mechanize and automatize our culture, we rather tend to place a premium upon feeble-mindedness. That is, we must remember that the job which has little of satisfaction in itself, as a job, is perhaps peculiarly adapted to the handicapped youngster.

This leaves us some 55% of children who are pretty normal individuals physically and mentally, with whom the problem is that of adjustment. I tend, with this group, to think of 3 steps of complexity of adjustment. Of course you cannot schematize life but perhaps it isn't too mechanical to follow this outline. In the first adjustment, we have what we would call the "family" period; they come to us with the problems of thumb-sucking, enuresis, temper tantrums—all of those affairs which have their basis in poor habit training by the parents. The parental dissatisfactions, the parental disappointments, the parental restlessness, nervousness and artificiality, here play an important part. We have the feeling that these habit problems that go to the pediatrician are very difficult of understanding if the pediatrician looks at the problems solely from the point of view of the child. It is so difficult to understand, for instance, the mother's overweening interest in the child's development if we do not understand the relationships which she has with her husband and other members of the family.

Secondly, there is the period of socialization—that period beginning at the age of 4 or 5 years, when the child leaves his family to compete with the child of the street and the school. There come all of the problems of shyness, poor companionship, of the effort to establish one's self in the community in whatever way seems easiest. So many of the problems of the court and school, problems of mischief, problems of making faces, of antics,



of raising the devil, are only the child's simplest way of making himself the center of attraction.

Thirdly, we have the period of sexualization—all of those problems that come from the child's attempt at solving the difficulties arising from development of his or her sexual life. A boy started to stammer at 13, and came to me at 16 because he simply couldn't talk to any other person. He was a shy and rather difficult boy, rather typically a Froelich's syndrome, who suddenly discovered at 13 that his genitalia were very undeveloped in comparison with other boys. He was, of course, simply beside himself, felt that he would never be a success, that he could never make his way with others, and the stammering appeared, and got worse, because he couldn't bring himself to make any sort of social adjustment.

What is the relationship of this work to the medical profession or to the County Medical Society? Only opinion can be given and in what further I have to say to you I should like to have you realize that I am giving only my own plan. It has been my good fortune during the past year to be working on a committee of the White House Conference on Child Health and Protection which has been interested in precisely this problem. We have come to certain conclusions and these, in part, I am presenting to you; but they are again, of course, presented purely as one way only of looking at the problem.

The psychiatrist's work can be rather easily divided into that which forms a technic and that which is a point of view. The psychiatric point of view involves: (1) seeing a conduct problem as purely a symptom of deeper stresses in the person's life. (2) having a high regard and respect for the child himself. I am amazed at the number of children who come to me after having been to many other physicians and who find in me the first person who has really interested himself in the way the child looks upon his own physical and social problems. I am interested, in the younger child, with the number of times that the pediatrician seems to forget that it is the child himself who is wetting the bed. One would think from the work of many physicians that it was the mother who was the person to be worked with in the matter of the enuresis; seeming somehow to forget that it is not she but the child who is presenting the difficulty. Frequently it seems never to have occurred to anyone to talk with the child about it and to find out the way that the child looks at it.

(3) Placing of high value upon non-verbal modes of communication; I mean to cover all of that group of fallacies built on the notion that a child understands only what is said to it. As a matter of fact the child rarely is interested in what is said to him, and is almost entirely governed by the way in which the thing is said and the *manner of conversation* that is held about him. It is startling to recognize the extent to which physicians discuss a young child with the mother, in the child's presence, saying of course that the child doesn't "understand the language". It is our experience that in this situation the child is often the only one in the room who really acutely and tragically catches the meaning and the importance of the stresses involved.

(4) Accepting the notion that the parents and others who surround the child so much live out their lives in the child's life.

These are some of the factors in what I would call the psychiatric point of view; what Dr. Meyer

calls "being psychiatrically intelligent". It is my hope that all physicians will be trained in these matters and it is my belief that the task of the Essex County Juvenile Clinic is to further the spread of "psychiatric intelligence" in the medical field.

This is all rather in contradistinction to the various types of psychiatric technic that have developed: highly complicated modes of psychiatric treatment. Probably such an institution as the Juvenile Clinic will turn to the psychiatrist as a specialist just as it turns to the surgeon or the orthopedist. I am trying here to make the clearest distinction between a way of looking at things and a highly specialized technic in psychiatric treatment, with, of course, the hope that in time such an institution as the Juvenile Clinic will not be needed, as we gradually bring into our medical practice the psychiatric point of view which is its chief aim at the present time.

May I briefly say to you that there is a movement in the medical schools toward getting away from specialties as specialties. That is, there is a growing tendency to get back to the point of view of the general physician, where the patient is looked upon as an integrated, acting whole. In 2 of the medical schools, Harvard and Johns Hopkins, there is a very definite tendency to give all students some conception of the environmental stresses in human relationships that play upon the patient. These are very hopeful signs. To these I may add my own hope that the medical man of the future will more and more understand the wide usefulness of the social worker. The family goes to the physician for advice about its most sincere problems. To these problems the physician is now to a large extent blind because he is not interested in his patient as a working, reacting mechanism, but only as a group of viscera, skin and bones. I make this appeal, that you look toward a situation which will find you giving help to parents in matters of the total social adjustment of their children, and of themselves, simply because you are the logical persons to do it, because the family looks to you to do it, and because if you don't do it you will find that in the field of conduct disorders, just as in many other medical fields, the quack, the charlatan, the poorly-prepared person, will come in to help the family simply because you will not accept a tremendously challenging and interesting burden which the family would very much prefer that you carry."

The following 7 new members were elected: Rose W. Bass, Bernard Fein, Philip Grossblatt, Gilchrist E. Matheson, John J. Reilly, James H. Trainor and Maurice M. Weinberg.

#### Academy of Medicine of Northern New Jersey Eye, Ear, Nose and Throat Section

E. LeRoy Wood, M.D., Secretary

At the meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey held Monday evening, April 13, the Chairman, Dr. J. Wallace Hurff, announced the following committee to investigate and consider the problem of the high cost of eye-glasses and to recommend a solution: Drs. Dennis F. O'Connor, Linn Emerson, Brayton E. Failing, William H. Hahn, Elbert S. Sherman, Andrew Rados, William F. Krone, Charles W. Buvinger, George J. Holmes

and Lee W. Hughes; the first named being chairman.

The following officers were elected for the ensuing year: Charles W. Buvinger, Chairman; E. LeRoy Wood, Secretary.

Dr. Hurff then introduced Dr. John McCoy, of New York City, who spoke on "Successful Treatment of Chronic Discharging Ears and Nasal Accessory Sinuses by Means of Zinc Ionization".

*Dr. McCoy:* My object in presenting this paper is to give my results and conclusions after using the method of zinc ionization during the past few years. It was first practiced by Dr. Le Duc, of France; later, by Dr. Friel, of England..

If we review briefly what takes place when zinc ionization is practiced, we find that ionization is a chemical decomposition effected by means of an electric current. There are certain laws governing this decomposition. Ions are groups of atoms which result from the electrolytic decomposition of a molecule. These ions are either electro-negative or electro-positive. The electro-negative ions are called anions; electro-positive ions are called cations. Hydrogen and the metals generally are cations. The electro-positive ions, or cations, tend to flow toward the negative pole. It has been found that by use of a solution of sulphate of zinc at the positive and the ordinary saline solution at the negative pole, it is possible to drive zinc ions into the exudate and into the membranes of the ear cavities. Some have gone so far as to claim that such a procedure will cure chronic necrosing mastoiditis. Our observations have not borne this out. They have proved to us, however, that this method will cure many cases which generally are regarded, from their symptoms, as being chronic middle-ear and mastoid necrosis.

In cases where there exists a posterior marginal perforation, or one in Shrapnell's membrane with bone necrosis and foul-smelling pus, this method should not be used. It has proved exceedingly useful, however, in cases of subacute and chronic discharge where the perforation is central or near the margin, and where numerous other methods used for chronic suppuration have failed. Before resorting to its use we believe that symptoms of extension to structures adjacent to the middle ear and mastoid should be ruled out, as far as possible, by means of x-ray pictures of the mastoid and by careful examination of the labyrinth.

The ear is thoroughly cleansed with warm water. A pledget of cotton containing 4% cocaine solution is then applied to the middle ear for a period of 5-10 minutes. The patient is then placed upon a table with the diseased ear upward. After the pledget of cotton has been removed, the ear is filled with a 1% or 2% zinc sulphate solution and the zinc electrode attached to the positive pole is placed in the ear through a vulcanite speculum (McCoy's modification), so that the zinc electrode and the zinc sulphate solution are in contact. The patient is then given the other pole to hold in the hand, or it is applied to the arm, being very wet with saline solution. Current is then turned on very gradually until a strength of 3 m.a. is reached. This is continued for 10 minutes, when the current is very gradually turned off. Unpleasant effects sometimes take place in the shape of slight dizziness or slight pain in the region of the eustachian tube, but they are very evanescent.

By this method the writer has treated a number of cases with results that were surprisingly gratifying, the patient's ear condition drying up

in 2-6 treatments, the treatments being administered once every 4 or 5 days.

Zinc ionization of the nose is practiced in the following way: The nose is cleansed with warm saline solution, a solution of 4% cocaine is applied to the part to be treated for a period of 5-10 minutes, usually with a pledget of cotton. The cavity to be treated is then filled with a 2% zinc sulphate solution or cotton wet with 2% zinc sulphate is applied to the part to be treated. Now, the zinc electrode attached to the positive pole is placed in the nose so that the zinc electrode and the zinc sulphate are in contact. The patient is then given the other pole to hold in the hand. The current is then turned on very gradually until a strength of 4 to 8 m.a. is reached. This is then allowed to continue for 10 minutes, when the current is very gradually turned off.

About 3 years ago, a doctor presented himself at my office for a discharge of mucopus from the antrum, with symptoms of focal infection, and this was after having had 3 major intranasal operations. My advice was to have the antral opening made a little larger, but he said that he was through with operations and wished to try any other means. I then thought of zinc ionization and applied it to his antrum. This was subsequently twice repeated, 4 and 8 days later, with the result that the antrum completely dried up and for 2 years or more it has remained dry.

## GLOUCESTER COUNTY

Henry B. Diverty, M.D., Reporter

At the Woodbury Country Club on April 16, physicians of the Gloucester County Medical Society met in regular session. An informal interesting talk was delivered by Professor E. J. G. Beardsley, of Jefferson College, Philadelphia.

Delegates present were: Dr. and Mrs. Miller, of Millville; Dr. Markes, from Woodstown, and Dr. Church, of Salem County. The following local members were present:

Drs. I. W. Knight, R. K. Hollinshed, of Westville; W. J. Burkett, of Pitman; H. M. Fooder, of Williamstown; J. Harris Underwood, Duncan Campbell, E. E. Downs, C. A. Bowersox, William Brewer, Paul Regau, H. B. Diverty, all of Woodbury; H. L. Sinexson, of Paulsboro; C. I. Ulmer, of Gibbstown; A. B. Black, of Mickleton; C. C. Sheets, also of Paulsboro, and C. C. Krusen, of Mullica Hill.

A luncheon was served by the caterer.

## HUDSON COUNTY

E. G. Waters, M.D., Reporter

The regular meeting of the Hudson County Medical Society was held on April 7, at the Carteret Club, in Jersey City. Dr. J. M. Cassidy presiding. The minutes of the March meeting were accepted as printed in the Bulletin.

The following communication from Dr. Coleman was read, and having been favorably reported upon by the Executive Committee, was approved:

"The assumption by Congress, in the Volstead Act, of control over the practice of medicine in the United States has raised the most serious



questions that have ever confronted the medical profession: (1) The right of the several states to regulate the practice of medicine within their borders; and (2) the right of the individual physician to treat patients according to his training and experience.

These questions have no relation whatsoever to prohibition as such; alcohol was merely the occasion of the assumption of the above-mentioned powers by Congress. Under other circumstances, Congress might forbid the use of toxin-antitoxin or forbid more than 3 grains of caffeine a day.

The right of the state to regulate the practice of medicine within its borders concerns the members of the medical profession only as citizens.

The right of the physician to the untrammelled exercise of his judgment concerns the welfare of his patients and his own freedom of action.

There were 2 ways of meeting the attack by Congress on the medical profession. (1) By testing the constitutionality of the medical provisions of the Volstead Act in the courts, and (2) by direct demand by the members of the medical profession upon Congress for relief.

The first method was tried and failed. A group of New York physicians organized the Association for the Protection of Constitutional Rights consisting of 928 members in New York and neighboring states to fight for the traditions and the rights of the medical profession. Dr. Samuel W. Lambert was elected president of the Association and under the auspices of the Association brought suit against the Government (Lambert v. Yellowley). An adverse decision was rendered by the United States Supreme Court.

If relief is to be had from the condition which exists, the individual members of the medical profession must now demand of Congress that the medical restrictions of the Volstead Act be repealed. Congress will probably listen to this.

In order to promote this action the enclosed resolution, sponsored by the Association for the Protection of Constitutional Rights, is being sent to a number of organizations for consideration. The greater the number of medical organizations that adopt it, the sooner will the prerogatives of the profession be restored.

It should be added that the Association for the Protection of Constitutional Rights is in favor of stringent regulations to control the use of alcohol by physicians and of severe penalties for violation of the regulations. This will afford protection to those physicians who believe in, and use, alcohol in their practice and will at the same time restrain any physician who might be inclined to abuse his privileges.

If the resolution meets with your approval, would you be willing to present it to your State Society for action?

Samuel W. Lambert, President  
James F. McKernon, Vice-President  
F. E. Sondern, Treasurer  
Warren Coleman, Secretary

John A. Hartwell	J. Bentley Squier
Samuel A. Brown	George David Stewart
Harlow Brooks	T. C. Chalmers
Charles L. Dana	Linsly R. Williams
Nathan B. Van Etten	James T. Gorton
	Executive Committee.

Association for the Protection of Constitutional Rights.

## PROPOSED RESOLUTIONS FOR PRESENTATION TO COUNTY SOCIETY

WHEREAS The Congress has undertaken to fix doses of wine and whiskey and brandy by legislative fiat, thus taking over the functions of pharmacologist and physician, and

WHEREAS the Volstead Act compels physicians to betray the confidences of their patients by keeping a record of their diseases and ailments for inspection by Federal prohibition agents, thus violating the traditions of the medical profession, medical ethics and the laws of a number of states, and,

WHEREAS relief from these conditions has been sought in the courts and has been denied by the United States Supreme Court, and

WHEREAS the Wickersham Commission has unanimously made the recommendation: (1) 'Removal of the causes of irritation and resentment on the part of the medical profession by: (a) Doing away with the statutory fixing of the amount which may be prescribed and the number of prescriptions. (b) Abolition of the requirement of specifying the ailment for which liquor is prescribed upon a blank to go into the public files. (c) Leaving as much as possible to regulations rather than fixing details by statute'.

BE IT RESOLVED—That the Medical Society of the County of New York hereby formally expresses its disapproval of those portions of the Volstead Act which invade the right of the State of New York to regulate the practice of medicine within its own borders and which deprive the physician of his right to the free exercise of his judgment in the practice of his profession, and

BE IT RESOLVED—That the Medical Society of the County of New York demands of Congress the repeal of said portions of the Volstead Act, and

BE IT RESOLVED—That the Medical Society of the County of New York urge each of its members to demand of his Senators and Congressman the repeal of said portions of the Volstead Act, and,

BE IT FURTHER RESOLVED—That the Secretary of the Medical Society of the County of New York be, and hereby is, instructed to transmit a copy of these resolutions to the Senators from New York and to each Representative in Congress of the County of New York."

It was moved and seconded that the papers for the evening be presented and discussed before the balance of the business session.

Dr. Edward G. Waters read a paper entitled "Plan for County Society Control of Periodic Health Examinations".

In presenting this plan of periodic physical examinations and publicity to the medical profession, I do not attempt to advise medical men as individuals on how to handle their patients and business. I present it as a practical plan to meet serious and unfair competition, and to offer something of real value to our public as a whole which must react favorably for the physician. It can be characterized even as a measure to restore to us that degree of public confidence which our more vindictive critics believe we have lost. While this plan has been fomenting in my mind, I have heard myriads of complaints and read many papers about medical economics, but a paucity of practical advice or definitive suggestions. The thought has resolved itself into

a form which I believe is applicable to the vast majority of communities in this country, with but few alterations.

For the purposes of clarity and reference, I have divided the plan into 4 major component parts, which I will now present in some detail:

(1) The adoption of a form of procedure for periodic physical examinations with delineation of minimum requirements for the examining doctor to meet. This is obviously the keystone. Any examination of this sort must be thorough and complete. A cursory examination of the heart and lungs, often through a half-unbuttoned shirt, isn't worthy of a name. Likewise, every thorough examination of the heart and lungs, but neglecting, for example, a rectal examination, lacks completeness. The patient must be stripped and ready for a complete examination, for halfway measures are not sufficient. To remove haphazardness and prevent omissions, a form of procedure is planned which constitutes a written list of examinations made from head to foot, but lists only those which any practicing physician should be competent to make. It does not include specialized examinations, as for example, a retinoscopic and sigmoidoscopic examination, but would include visual eye tests, and a rectal examination. When specialized examinations are required, as for example, retinoscopic, sigmoidoscopic or cystoscopic, it will be feasible and highly practical to refer the patient for these examinations to qualified men, such examinations to be part of the general examination and in no sense to constitute a "consultation". The patient may thus be insured a thorough and adequate examination with "reference" but without "consultation". The specialized examinations will of course add to the charge made, if the patient follows the general examiner's advice who suggests them, but he knows in advance why they are requested and what the extra work entails, apart from the regular form of examination.

(2) The adoption of a standard fee for the community. It is imperative for the success of such a plan that a fee be charged which is not only compatible with the ability of the average examinee to pay, but which is also standard among those physicians who enroll as county medical examiners in given communities. The fee must at least meet or better that charged by lay-controlled groups and clinics operating for gain. It must be unalterable by the physician, and include all that the standard form of procedure delineates. In addition, there must be definitely known charges for any additional examinations, such as x-ray and blood chemistry, and these must be comparable with the scale of charge for the entire examination. If such a plan is to succeed, the patient must be given all he needs to warrant thoroughness and completeness in examination and diagnosis, but his finances must be conserved and we must not permit his being mulcted through incidental examinations. There are plenty of good x-ray and diagnostic laboratories which will be only too willing to cooperate in this work, and furnish service at less than standard rates.

(3) Publication of a list of members of the County Society of the district, indicating those members willing to give the examination at the standard fee. The public must be apprised of the adoption of such a plan, and must know what

physicians are available for examinations. To avoid any possibility of confusion as to medical standing, the entire roster of the county society—which means the roll of men acceptable to the medical brotherhood—should be published. However, as plan acceptance is elective with members, such published lists should clearly indicate those men who are willing to give examinations, as contrasted with men in good standing who neither subscribe to the form procedure nor the standard fee. The publication of such lists will prove of material assistance to the county societies. The public will be enabled to ascertain the identity of medically-eligible men. Illegitimate practitioners will find the going harder, and twilight practitioners will be refused the light of community acceptance. A reference list of competent physicians will be available in emergency. Physicians will profit individually and as a group, for an ethical type of advertising is available. The public will profit vastly from the opportunity to distinguish the medically acceptable from those who are not, and through elimination of the undesirables in medicine.

(4) Publication of the detailed form of procedure. The public at large does not know what a complete medical examination means. The average person knows that for a cold his chest is examined, and for a sore throat his nose and throat are gone over, but he has seldom if ever gone to his physician for a complete examination when he was not sick. This fact doubtless accounts in large measure for the reputation for completeness and thoroughness acquired by lay-controlled clinics specializing in health examinations. A patient visiting the office for treatment of a head cold, or sebaceous cyst of the scalp, would think it very queer if the doctor tested the ocular movements and reflexes, took the height and weight, looked in the ears, tried the patellar reflexes, and so on. But the same patient, subsequently taking a routine examination at a clinic specializing in such examinations, would doubtless widely advertise the thoroughness of the going over he received. He would often compare critically his experience with his visits to his own doctor. Such a patient ignores the truth of the matter—which is, that he never went to his doctor for a complete examination when he was not in fact a "patient". But, if he had gone to his doctor for a complete examination, would he have received one? And if he had, how would he know it to be adequate and thorough. In my opinion, the public should be acquainted with what may be expected in a complete examination. If people know what is due them, the examining physician must render it to them. The physician conducts a complete examination, and the patient is satisfied. If it is not thorough, the patient will know it, and the physician will suffer in consequence.

The form of procedure must be broadcast, and copies of the form made available on request. It will not take the average American citizen long to know exactly what to expect for his money, and we may be sure that he will see that he gets it.

In addition to the 4 major component parts detailed above, there are numerous factors of less importance which require mention and consideration. I hardly need mention the value of the plan to the public in early detection of conditions which are of serious import if neglected. Likewise, I need hardly detail the value of the



examinations to the physicians who detect those defects which require attention and treatment. But the Medical Society must police its own organization, or have it policed for them, to insure the patients against unnecessary and expensive follow-up treatments by the occasional commercial and dishonest examiner.

When the examination is concluded the patient should be given a written report, with notation of defects which require attention. The detailed record of the examination is to be held and filed by the examiner; however, if the patient decides to take treatment elsewhere, a copy of the complete record of the examination must be forwarded to the physician treating the patient, should he request it. This is proper and ethical, and cannot fail to materially increase confidence in our efforts along these lines.

In conclusion, I believe the publicity associated with this plan will be a strong welding bond between physician and layman. The public is entitled to know the names of competent physicians willing to give adequate health examinations for a set fee. The public is also entitled to detailed knowledge of the content of adequate health examinations. The education along these lines cannot help but make for better service to patients and cannot help but make the average physician better in respect to detail and completeness in his work. There is bound to be an increase in the confidence and respect of the public toward physicians as a group, for a move which is so clearly for their betterment. The County Society may thus become a real factor in the promotion of public health plans and in the protection of public health by the endorsement of means of bettering medical practice.

In this paper, I have not discussed in detail the relationship of physician to patient, advice for treatment, disposal of examination forms, reference of patient elsewhere, care of laboratory and x-ray needs, etc. I have rather definite ideas upon these matters, but the one of prime importance at first is to pass and act upon the value of the *plan* itself. When the major issue is decided, the lesser ones are easily dispatched.

#### DISCUSSION

This paper was discussed by Drs. Quigley, Norton, Gordon, D'Acerno, and Waters. A motion was made and seconded that the president appoint a committee to further and carry to a concrete conclusion the ideas embodied in Dr. Water's report.

Dr. Merrill A. Swiney read a paper—"Technic in Obstetrics".

Every physician will agree that an obstetrician may in one sense be skillful, and yet he may have disastrous results. He will have a death rate of 1 in 50 from puerperal sepsis, unless he also attains skill in conducting his war against germs. During the last generation the germs have been holding their own in the battle. The doctors have not cut down the death rate from puerperal sepsis. In many cities a woman takes less chances of dying from infection if she goes to a midwife. The latter does not carry on her hands so many germs of infection as the doctor who is handling all sorts of cases.

About 15 years ago I read a paper before this society on the use of iodine in obstetrics. I had then used it exclusively for 3 or 4 years. After a continual use of this method for over 15 years,

I am still enthusiastic about it. It has proved its efficiency. We have delivered in my sanatorium in 13 years, 1292 women. Only 1 of those patients died of puerperal sepsis. Before entering the sanatorium, she had been bleeding from placenta previa for 2 weeks. Many physicians had examined her. When she was admitted, her temperature was 102.8°; pulse, 140; Hb., 55%. A large pack was in the vagina and the lower uterine segment. She showed all evidence of infection, when admitted. She died of general peritonitis.

In 4 engagement cases, forceps failed. Then I did cesarean section. These 4 women lived, and there was no sepsis, showing that iodized forceps carried no infection into the uterus. This is the proof I offer that my *antiseptic* technic is practically perfect.

I gave up the idea of *aseptic* technic many years ago, as I considered it a delusion. The technic depends on 3½% solution of iodine. At examination, the vulva and perineum are painted with it; the dry rubber glove is painted with it. At delivery, the vulva and perineum are again painted, and all instruments are painted with it. I did use 7% solution of iodine, but occasionally it blistered the skin; the 3½% solution gives no trouble.

One thorough vaginal examination is my rule. If it is complete, no other is necessary, until delivery is decided upon. Some doctors make many examinations in the course of long tedious labors. I unreservedly condemn that practice. The rectal examination is unsatisfactory to me. My morbidity and mortality rates prove that a vaginal examination can be almost perfect. The patient is put in the lithotomy position on the examination table; pubic hair is shaved; vulva and perineum are painted with iodine; a dry rubber glove on the left hand is also painted with iodine and careful vaginal examination follows.

We delivered almost all patients in bed. We take only high forceps, cesarean section, or difficult version cases, to the delivery room. We put flannel leggings on the patient and place her on an obstetric pan of my own design. This pan makes the delivery easy; the legs are in the best possible position to relax the vaginal outlet. Not much care is needed to prevent contamination, as the pelvis is elevated from the bed, and the drainage drops directly into the pan. If there is considerable leukorrhea, we use an instillation of 4% mercurochrome, 15 minutes before the examination; we use it occasionally during progress of the labor. The use of the pan prevents contamination in the third stage. After delivery, the binder is adjusted, the patient is covered, the pan is removed, and the bed is dry. There is a minimum of disturbance to the patient.

My method is simple; it is much easier than delivery on a table, in ordinary cases; patient is not excited; relatives are not alarmed; it causes much less anxiety than taking the patient to a delivery room; requires a minimum of ether; and it needs but few assistants.

This technic can just as well be carried out in the home. Nothing can be simpler; nor more nearly perfect. I urge the general practitioner who is handling obstetric cases to make note of and try this technic. It saves a great deal of time wasted in boiling gloves and instruments and waiting for them to cool.

Discussed by Drs. Quigley, Norton, Gordon, D'Acerno and Waters.

The following applicants having been favorably reported upon by the Board of Censors, were declared elected: Drs. Solomon Hirsch, William Yudkoff, and Eugene M. Kiely.

The following new applications were received and referred to the Board of Censors: Drs. Nicholas M. Alter and Lawrence V. Lindroth.

### Clinical Society of North Hudson Hospital

J. Africano, M.D., Reporter

The regular monthly meeting of the Clinical Society was held Tuesday, April 14, with Dr. Hekimian acting as chairman; 47 members and guests present. Dr. Tannert read the hospital report for March 1931: 233 admissions; 238 discharges; 20 deaths (13 under 48 hours), of which 11 were surgical, 5 medical, 2 new-born, 1 urologic, and 1 pediatric.

*Dr. Klaus* discussed a fatal case of "Mesenteric Thrombosis with Gangrene of the Intestines". The patient was ill for 3 days with symptoms of intestinal obstruction, especially vomiting, distension and fever; though the history suggested nothing to account for obstruction. Small intestine was found to be gangrenous in segments, with almost healthy loops in between, for a distance of 15 feet, while the mesenteric vessels were definitely thrombosed; nothing could be done for the patient, and he expired 18 hours postoperatively.

*Dr. Comora* reported a "Bilateral Detachment of the Retina". M. C., white, aged 42, admitted October 13, 1930, with symptoms of well-developed toxemia of pregnancy and renal insufficiency; had 9 children, and 2 miscarriages; B. P. on admission, 224/156. Right eye showed a beginning choked disc with edema of the surrounding area; several small fresh hemorrhages, and detachment of almost the entire lower half of the retina, which ballooned out into the vitreous cavity. Left eye showed detachment involving both upper and lower portions of the retina, without damage to the macula. Vision was limited to perception of fingers at 2 feet. Tension of both eyes normal or slightly less.

On October 25, 1930, the edema of both fundi was more marked; exudative patches larger and more numerous; bulbar conjunctiva of both eyes edematous and greyish in color. Vision of both eyes limited to finger perception.

On October 27 labor was induced by the Voorhees' bag and a dead macerated, male fetus, of 8 months' gestation, was expelled. On October 30, the fundi showed marked improvement; detachments in both eyes had receded remarkably, and the upper detachment of the left eye had disappeared entirely. Choked disc increased however; there was more tortuosity of the vessels, more venous congestion, and greater number of exudative and hemorrhagic spots. Vision improved.

*Dr. Selinger*, "Multiple Intra-ocular Foreign Bodies". E. D., boy, aged 7, playing with detonation caps, caused an explosion which produced the following results:

Face was peppered with copper particles, left eye perforated, lens displaced, and traumatic iridectomy was accomplished; the lens was cataractous, vitreous lost, tension gone, vision limited to light

perception and poor light projection; also detachment of the retina, and retention of 2 foreign bodies. The right eye, supposedly good, showed point of entrance of a foreign body at about 5 o'clock position. Examining the fundus, with pupil dilated, a shiny piece of copper was clearly visible in the vitreous at about 4 o'clock position. The question arose as to the best line of procedure for saving the patient's vision in the only good eye.

After consultation it was decided to leave the right eye and its foreign body alone, and watch it carefully for the possibility of any reaction; secondary effects, or sympathetic results. The vitreous hanging out of the left eye was cut flush with the cornea and allowed to recede; otherwise both eyes were left alone surgically, and medically they were kept under atropin.

Vision in the right eye is 20/15 with a +1 sphere combined with a +0.50 cyl. ax. 90°. L. E. vision limited to light perception and poor light projection. The everlasting question now arises: "What will happen to the right eye, with its contained foreign body?" Time alone will tell.

*Dr. Comora*, "Sublingual Cyst; 2 Cases." H. L. and A. S., each aged 15, giving vague history of trauma followed by swelling under the tongue gradually increasing, and causing difficulty in swallowing and pressure on the larynx, not associated with pain or other discomfort. Examination showed a firm, cystic, oval tumor, the size of a small egg, with long diameter anteroposteriorly, slightly to left of the median line; inferior to the submaxillary gland and rather freely movable. Under general anesthesia, an incision was made in the floor of the mouth, from before backward, and with dull dissection the tumor, in each case, was shelled out intact; wound closed with silk sutures.

Cysts found in the sublingual area are usually dermoid in character, and are sometimes erroneously diagnosed as ranula or sebaceous cysts. Dermoids are congenital but often do not develop until late in life. The great majority occur between the ages of 12 and 25. They are benign until they encroach upon other organs, when they become dangerous. Exploratory puncture will usually make the diagnosis, for aspiration of the sebaceous contents points either to dermoid or thyroglossal cyst, and they cannot be differentiated clinically; diagnosis depending on pathologic study of the cyst contents or wall.

*Dr. Ash*, "Chronic Mastoiditis Complicated by Brain Abscess." M. B., female, aged 17, was admitted October 24, 1930, complaining of chills, headache, and vertigo; slightly irrational; temperature 99.2° in morning and 104° in evening; pulse, 120-140. Had the usual children's diseases and a discharge from both ears at intervals for years.

Present illness began on the morning of October 12, when she awoke with dizziness and vomiting. These symptoms continued for about a week, then she developed chills and fever.

Physical examination showed moderate amount of rigidity of the neck; positive Kernig and Oppenheim; knee-jerk absent; pupils regular and reacted to light; retinal veins full and tortuous, with double papilledema; purulent discharge from the right ear with slight edema over mastoid and moderate amount of tenderness.

Radical mastoid operation revealed cholesteatoma in the middle ear with unhealthy dura exposed in the middle and posterior fossas; lateral sinus was also covered with dark, unhealthy gran-



ulations. Within 24 hr. the fever had disappeared and the pulse rate dropped to 100. The drowsiness, headaches and vomiting gradually subsided and in about 4 weeks following operation the patient was feeling quite normal. Two weeks later, or 6 weeks postoperative, fever rose to  $101^{\circ}$ ; the patient became slightly delirious, had some headache, vomited frequently and had 3 convulsions in 24 hr. Spinal puncture showed clear fluid and normal pressure, 24 cells per c.mm.; slight increase of globulin and decrease of sugar. Culture negative. Drawing spinal fluid apparently relieved the intracranial pressure and the patient's symptoms gradually subsided. The mastoid wound was too small for the amount of discharge and since the headaches and vomiting attacks were returning, it was decided to complete the radical mastoid operation by making a flap. The dura was also inspected and incised. This gave vent to some clear spinal fluid. The headaches and vomiting ceased and the patient left the hospital about 1 month later.

Five months following operation the patient shows a gain of 14 lb; the discharge has lessened, has no bad odor, and appears to be coming from a subdural abscess in the posterior fossa.

*Dr. Ash.* "Pansinusitis Terminating in Meningitis." W. R., male, aged 13, admitted with considerable swelling, edema and tenderness of the forehead extending into eyelids; intense pain; profuse purulent discharge from both nostrils and both ears. Present illness began with grippe 2 weeks before admission. Considerable tenderness, swelling and edema with fluctuation over the frontal bone. Entire mucous membrane of the nose swollen; right eye deviated outward, with limitation of movement; fields, vision and optic nerve heads normal. No signs of meningitis. Temperature  $103^{\circ}$ ; P. 110; R. 20. Culture from nose: *Staph. aureus*.

A diagnosis of pansinusitis, mainly involving the right side, was made. The right middle turbinate was removed and the anterior ethmoid cells opened, which released  $2\frac{1}{2}$  oz. of thick pus. The opening into the right frontal was enlarged; and also an opening was made into the right antrum. Thin, foul-smelling pus escaped from the frontal sinus and antrum. Incisions  $1\frac{1}{2}$  in. long were made above the inner part of each brow, which gave vent to 3 oz. pus. It was thought that this would be sufficient drainage to allow the patient to recover his strength before having a more radical operation.

There was gradual improvement in condition, until about a week later, when fluctuation was noticed at the outer end of the left eyebrow. This area was incised, with escape of considerable pus. A left antrotomy was performed and considerable pus was washed away. The swelling in the mucous membrane of the nose had subsided, nasal breathing had become quite free and the amount of pus from the nose and frontal region had lessened considerably; but as the frontal tenderness disappeared, it spread along the left parietal region to the occiput. Pain in the head became more severe. During the next 3 days pulse dropped to 72, became weak and irregular. Projectile vomiting occurred; the patient became drowsy and expired.

In reviewing this history I am convinced that the patient was doomed to die from the very beginning, yet a more careful examination of the central nervous system, e.g., testing of reflexes, searching for evidences of muscular spasms and paralysis, record of hearing, examination of the

spinal fluid, a greater exposure of the frontal bone, etc., would undoubtedly have simplified the diagnosis.

*Dr. S. Braunstein.* "Case of Trichinosis." H. H., male, aged 19, white, employed on a swill truck in Secaucus, admitted because of pain in the calves, thighs and elbows; more severe with the arm extended. Venereal denied.

He developed pains in the muscles of the lower extremities and he noticed that his face, eyes and hands became swollen, so much that he could hardly open his eyes.

A chain of glands palpable on both sides of the neck in the postcervical region; fairly firm, discrete, freely movable and not tender. Tenderness at both elbows and fore-arms; no swelling or redness of joints. Epitrochlear glands palpable and also the axillary glands. Tenderness over both calves and thighs; no edema.

Blood count, 5,632,000; W. B. C., 16,600; polys., 80%. A test for the *Bacillus mellitensis* was negative. The Widal showed a partial agglutination 1-40 and 1-80.

The striking symptoms in this case are the edema of the eyes and face, fever, muscular phenomena, adenopathy, enlarged spleen and heart murmur. With these findings we considered this a case of trichinosis with the following to be considered in the differential diagnosis: Glandular fever, aleukemic leukemia, typhoid and lues. The history of eating pork over a long period of time, the fact that several of his friends with whom he worked were also taken sick about the same time with similar symptoms, the swelling of the eyes and face and the muscular pains all gave evidence for the diagnosis.

Just 2 days before the patient was discharged we teased the deltoid muscle with a 28 gauge needle and were rewarded with a beautiful specimen of the trichina on the slide. Later a biopsy was done and this also showed the trichina on frozen section.

*Dr. Kaplan.* "Strangulated Non-descended Testes." J. O., aged 32, white, occupation milkman; admitted with the chief complaint of pain in the right inguinal region. After an alcoholic bout, the patient started vomiting, which continued all the next day. Then experienced a sudden sharp, lancinating pain in the right inguinal region, constant and radiating upward along Poupert's ligament to the iliac crest. The pain became cramplike after a few hours. The next day, he went to work but was unable to continue because of another attack of sharp pain.

There was a marked tenderness on palpation over the right inguinal region, and a mass about the size of a walnut, not reducible. No impulse on coughing. Scrotum did not contain any testicles. The right inguinal canal was opened and the testicle found edematous and gangrenous with the spermatic cord twisted upon itself 4-5 times. He made an uneventful recovery.

*Dr. Eckert.* "Bilateral Chocolate Ovarian Cysts—Ruptured." Chocolate cysts of the ovaries are benign cystic formations closely allied to and frequently spoken of as a form of extra-uterine endometriosis. Chief characteristics are either cystic formations or cavities, frequently bilateral, filled with a chocolate colored tenacious fluid. According to Bailey, endometrial tissue finds lodgment on the ovary and implants itself; then invades the ovarian

tissue and excavates and proliferates. The proliferated tissue degenerates and this, with the blood from menstrual activity, results in a peculiar cyst. The diagnosis is very difficult and generally made at the time of operation, or by aid of the microscope. It may be easily confounded with chronic adnexal disease although the condition itself is not inflammatory.

### Medical Center of Jersey City

Joseph Binder, M.D., Reporter

The regular monthly meeting of the Medical Staff was held on Thursday evening, April 9, in the Out-Patient Department of the Hospital, Dr. C. B. Kelley presiding. Among those present were: Drs. O'Hanlon, Binder, Peters, Houghton, Braunstein, Hasking, Alter, Perkel, Fineberg, Street, Scially, Ghee, Cohen, Riese, Rector, Benjamin, Harter, Christian, Rundlett, Variano, Fellman, Winter, Perlberg, Macchi, Burke, Sprague, E. Connell, Borshaw, Siegler, and Freilich.

Dr. Charles M. Peters presented 2 cases of "Tumor of the Jaws", both patients over 50 years of age. The growths were of the upper jaw, diagnosed *adamantinoma* and *carcinoma*. Particular stress was laid upon a correct diagnosis as a means of planning a successful surgical procedure and conserving function and esthetics. Under radium and x-ray treatment the carcinomatous mass entirely subsided. The *adamantinoma* was treated by complete removal, cutting outside of the free border with cautery, and previously ligating the carotid artery.

Dr. Peters also presented different stages of operative procedure in *cleft palate* and *cleft lip*, emphasizing the importance of operating within 3 months to obtain proper correction of the bones. At this period the bones are treated in the same manner as one would a fracture. The early bone operation corrects to a great extent the lip and flattened nostril. The lip operation usually follows in 6 weeks and the soft palate around 18 months, or before speech begins. The mortality is low providing the proper preparation of the infant is carried out. The advice given to parents to postpone these operations in infancy is deplorable.

These cases were discussed by Drs. Braunstein, Alter and Kelley.

Dr. Rundlett presented 2 cases of "Diphtheria of the Penis, Following Circumcision". In the Journal A. M. A., May 3, 1930, there was a case of penile diphtheria reported, and it was stated that only 15 could be found in literature. Generally, diphtheria of the penis is secondary to some other diphtheritic lesion in the body; nevertheless, several cases have been reported in which the infection was primary in the genitals. A number of cases reported in the literature occurred a few days after circumcision. The case cited by the Journal A. M. A. is the only one which has ever occurred in the Municipal Contagious Disease Hospital of Chicago, out of a series of approximately 14,000 cases of oral diphtheria.

We present a case (by We, I mean Dr. Troost, who was with me at the time, and to whom much credit is due) as follows: A 9 months' old child was admitted to the Medical Center for circumcision. Unfortunately, there is no record of a routine admission ward culture. Baby was operated on, on

January 8, 1930, and infection first suspected on January 15.

Dr. Emmet Connell saw the child next day and suspected diphtheria. Culture was sent to the laboratory and reported negative for diphtheria. Case re-cultured, both glans and throat, and the report came back, positive for penis, negative for throat. I was requested to take him over to Isolation. He received 10,000 units diphtheria antitoxin intramuscularly and the glans was sprayed daily with diphtheria antitoxin. Wet compresses of boric acid. There was extreme redness about, and the whole area of glans covered with thick grayish-white membrane. On January 19 there was a sudden rise in temperature, and within a few hours a sharply defined reddened area extending well up on the abdomen and down on the thighs and scrotum. It was not the typical, brawny red of erysipelas, but it was raised and indurated.

As this infant had received already a large dose of diphtheria antitoxin, we hesitated about giving another serum for the erysipelas. The dressing was changed to warm magnesium sulph., and there was a slight recession up to January 25, when the area again began to extend. There was involvement of the buttocks, showing a sharply defined erysipelas with distinct line of demarcation. Erysipelas antitoxin was given (500,000 skin test units, equal approximately to 10 c.c.) but the lesion continued and extended, and the child developed bronchopneumonia. Getting no results from the erysipelas antitoxin, we switched to the antistreptococcal polyvalent serum, 20 c.c., with gratifying results, proving that we had a streptococcal erysipelas. Apart from a severe serum rash the little fellow continued to improve and went home on February 12 cured.

This was the second case we have had. The other, a 3 year old boy, was circumcised on December 17, 1929, and discharged on December 19. He was re-admitted to the hospital through the G. U. Clinic 2 days later with what was supposed to be an infected circumcision. On December 28 child developed high fever, difficult breathing and swollen cervical glands: apparently very toxic. Examination revealed that throat was covered with grayish white membrane. He was given 20,000 units diphtheria antitoxin by the throat specialist who also requested isolation. The penis was sprayed twice daily with antitoxin and kept moist with warm Wright's solution. Laboratory reports were positive for nose, throat and penis, until January 20, when we got our first negative. On January 24 temperature rose to 103°. Examination of chest revealed bronchovesicular breathing in right median line, with limitation of breath sounds pointing to a bronchopneumonia. Child expired on January 26.

Cases were discussed by Drs. E. Connell and Siegler.

Drs. Sprague and Doran presented 3 cases of "Paget's Disease".

*Case 1.* Female, broke left leg 10 years ago. This united well, but patient still complains of pain, with bowing of left leg. Later on there was bowing of the right leg. About 8 years ago she noted that her hat did not fit head and also that her right shoulder bothered her. Paget's disease was suspected, and diagnosis confirmed by x-rays.

*Case 2.* Male, with history of disease of 12 years' duration. The tibia and fibula showed definite changes with bowing which is so characteristic of the disease.



*Case 3.* Female, admitted with fracture of femur. Radiograph showed evidence of Paget's disease, in this case not extensive. Patient was allowed up after being in bed for 10 weeks. In spite of the fact that there was a large amount of callus thrown out at the site of fracture, this patient sustained a spontaneous fracture of the same femur 3 in. above site of previous fracture.

*Dr. Benjamin* presented 4 cases of "Pott's Disease in Adults", because of the relative rarity of the disease in the adult; 10% of cases. There were 2 male and 2 female patients, ages 27, 46, 35, and 17 respectively, the average age of onset being over 20 years. The chief complaint was pain, acute and severe in 2, and gradual in the others. The girl of 17 had pain for 3 months. The man of 46 complained of paralysis.

In contrast, *Dr. Benjamin* also showed 3 cases of "traumatic spondylitis" (Kummel's disease).

In Pott's disease, x-rays early show body then cartilage destruction, with later increase in cartilage width, and perivertebral thickening, showing as spindle-shaped shadow of thickened soft parts. If this breaks down abscess results. In the adult, acute onset with pain is more common, and 10% of these show paralysis due to inflammatory mass, bony encroachment, or pachymeningitis.

*Dr. Harter* presented a case of "Recurrent Carcinoma of the Rectum". Female, first seen in 1928, with mass in rectum, protruding on excision. Biopsy showed *adenocarcinoma*. Hemoglobin was 50% and patient was transfused with 1000 c.c. whole blood. Tumor then removed by actual cauterization. Stricture of rectum resulted. In April, 1929, treatment was with radium 1630 m.c. amperes. Patient not seen until November, 1930, when she complained of bleeding from rectum. Digital examination elicited a tumor, the size of small lemon, on anterior wall of the rectum. Operation of colostomy. There was no evidence of metastasis. The tumor decreased in size to small hazel nut size. It was then removed by resecting the rectum. Proximal end cauterized and sutured, and levator ani closed over. Patient is draining through colostomy wound.

Discussed by *Dr. W. Friele*.

*Dr. Braunstein* showed specimen of autopsied rabbit used in performing the Ascheim-Zondek test for pregnancy. Instead of using a series of immature mice, he used a young rabbit 10-12 weeks' old, and injected 8 c.c. urine. The ovaries of this rabbit showed hemorrhage indicating that the patient from whom the urine was taken is pregnant.

*Dr. Hutchinson* reported the autopsy findings of a case of "Ulcerative Staphylococcus Aureus Endocarditis" in which source of infection was not determined.

### Bayonne Hospital Clinical Conference

Maurice Shapiro, M.D., Secretary

The regular meeting of the Clinical Conference of Bayonne Hospital was held Monday evening, April 6, with *Dr. Brooke* acting as Chairman and *Dr. Shapiro* as Secretary.

*Dr. Finger* reported from the service of *Dr. Brooke* 5 cases of breast tumors, in which the microscopic diagnosis from a quickly frozen section was of immediate aid to the surgeon in deciding upon radical or conservative operation.

*Case 1.* Female, aged 50, admitted March 3, with

history of noticing 2 weeks previously a lump in her right breast about the size of a walnut; not painful and had not enlarged since then. Sister died of carcinoma. Mass easily palpable just below nipple of right breast; no fixation; no adenopathy in right axilla. A semilunar incision was made on either side of the nipple, at the edge of the gland and the tumor was gradually dissected out. The skin was closed with silk worm and clips.

Report of the specimen sent to laboratory showed a scirrhus carcinoma present, about 1.5 cm. in diameter, without any lymph-nodes.

*Case 2.* Female, aged 31, admitted March 22. Trouble began 4 weeks previously, when she noticed a painless lump in her right breast. She consulted a physician who advised its removal. A biopsy was done and the section immediately examined by frozen section method. After report was obtained from the laboratory the entire breast was removed and wound closed with silk worm and clips. Specimen was quite cellular, with moderate amount of connective tissue in its meshes. The nodules were not encapsulated and tumor tissue was present in the lymphatics. Diagnosis: *Adenocarcinoma* of breast. This case is interesting because of the patient's age. According to *Babcock*, carcinoma of the breast in women under 35 years of age is unusual.

*Case 3.* Female, aged 51, admitted March 22. About 5 months previously patient noticed a retraction of the left nipple and a lump in the breast. Sometime later she began to suffer from shooting pains down the left arm and progressive swellings in left axilla. She consulted a physician, who sent her to The Memorial Hospital, in New York, for deep x-ray therapy. She received 5 treatments and was advised to have an operation. The skin in the region of the left breast was discolored from x-ray therapy. The breast was enlarged and the nipple retracted; firmer than normal and there was a nodular mass in the left axilla. Large elliptical incisions were made extending from axilla to a point well below the left breast, the underlying fascia and part of the pectoralis major were removed. The axilla was explored and some fascia and lymph-nodules removed. The wound was closed with silk worm gut and clips.

Report showed a very scirrhus breast with numerous typical and irregular cells scattered about. Tumor tissue had invaded the surrounding structures. Being an advanced stage of the disease, recovery, according to statistics, is less than 20% chance.

*Case 4.* Male, aged 30, admitted March 5. Trouble began about 9 years before admission. He was rowing for an athletic club and received a severe blow with an oar, in the left breast. Two years after the accident, noticed a lump in the same breast, which was becoming progressively larger until it had finally reached the size of a lemon. The breast had been sore ever since the accident, but had never given much trouble. Removal was advised.

An oval incision was made over the mass and tumor removed with surrounding fatty tissue.

Report was a fibro-adenoma without any evidence of metastasis.

*Case 5.* Female, aged 29, admitted December 3. About 8 years ago she noticed a lump in her right breast which gradually increased in size

until it reached the size of a lemon; a hard, freely movable lobulated mass. Incision made through skin, superficial fascia and gland substance intervening between fascia and outer wall of tumor. Entire growth was excised, and cavity approximated by deep sutures followed by closure of superficial wound.

Tumor consisted of 9 small firm masses which were well encapsulated. Microscopically there was atrophy of the glandular tissue. Intracanalicular fibro-adenoma.

*Dr. Antapol* stated that diagnosis by frozen section, if the pathologist has been notified in advance and can have things prepared in time, can be made in 5 minutes. Experience has shown that diagnosis made in the microscopic stage results in the highest percentage of cures. He also stated that after operation on a malignant case, there is a metastasis of the growth by a milking or suction action of the lymph channels and that, therefore, it is necessary to institute x-ray or radium treatment immediately. These conclusions have been verified by laboratory experiments on animals. He stated that there are 3 reasons for diagnosis by frozen section. (1) The question whether the operation shall be radical or conservative. (2) Clinicians realize that the microscopic stage of the disease should be recognized. (3) To differentiate between benign and malignant tumors.

*Dr. Brooke* suggested that all cases of malignancy where the diagnosis is made from clinical evidence should have a chest x-ray plate made in order to see if there is any metastasis into the lungs. He believes that if cases show metastasis they should not be operated on, as it only hastens death.

*Dr. Murray* reported the very interesting case of a woman about 32 years of age who began vomiting with extreme pain in the abdomen, after previously complaining of a dysmenorrhea. *Dr. Brooke* saw this patient in consultation and thought there was ovarian trouble. At operation a tuberculous peritonitis was found and tuberculosis of the appendix, ovaries and tubes. The patient is now getting better.

*Dr. Brooke* suggested that one should always bear in mind tuberculosis when there are ovarian and tubal symptoms. He thinks that panhysterectomy is indicated in this case because tuberculous cases are always over-sexed, and the resulting artificial menopause reduces sex desires and helps toward improvement.

*Dr. Feinberg* reported on the use of antitoxin in several cases of erysipelas. Two cases were confined solely to the face and the other extended to the chest and other parts of the body.

Treatment used, 5000 units of erysipelas antitoxin in each case, plus the local treatment of magnesium sulphate, glycerin dressings and boric acid applications.

In 2 cases temperature was normal after 48 hours following administration of the serum, while in the more extensive case the symptoms cleared up and condition abated after the fifth day. Local use of immune serum, after the methods of Rivers and Tillet, showed that the infiltration of skin with normal or immune serum renders the areas thus treated quite refractory to infection with hemolytic streptococci. In most cases it is found that the process extends to the infiltrated area and then stops. In Bellevue

Hospital, New York, the largest erysipelas service in the world, the antitoxin treatment is employed to the exclusion of all other methods.

## HUNTERDON COUNTY

Barclay S. Fuhrmann, M.D., Reporter

The Hunterdon County Medical Society met at Flemington, April 21, at 10.30 a. m. The following members and visitors were present: Drs. A. H. Coleman, M. H. Leaver, Francis Apgar, E. F. Purcell, L. C. Williams, G. B. Tompkins, W. E. McCorkle, E. W. Closson, George Henry, B. S. Fuhrmann, F. G. Scammell and H. O. Reik.

In the absence of the president, the meeting was called to order by Dr. Coleman.

After transacting the usual routine business, and hearing a report of the treasurer which showed the society's finances to be in good condition, the president called on Dr. Ernest F. Purcell, of Trenton, to read a paper on "Potter's Version". Dr. Purcell traced the application of "version" from its inception years ago, to the present day and showed the changes that had been brought about in the mechanics of the operation. The paper was very beautifully illustrated with drawings and, at the close, by showing a "clinical movie" of actual cases, which illustrated better than words the actual operations. The clear and concise manner in which Dr. Purcell presented his subject was much appreciated.

After some discussion of the general operative procedures in obstetrics, the meeting adjourned and we were served one of the famous chicken and waffle dinners by the Union Hotel.

## MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Medical Society met in the Carteret Club on the evening of April 8, with Dr. Swern presiding.

The regular order of business was suspended, and the moving picture, "Spinal Anesthesia", exhibited.

The application of Dr. Gerold H. Miller was read and referred to membership committee.

A communication relative to the parking problem was referred to a committee, with power to confer with the City Commissioners.

The subject of contract practice again appeared on the floor, and following a lengthy discussion, the President appointed Drs. Samuel Sica, C. H. Mitchell, E. F. Purcell, A. D. Hutchinson and G. A. Corio, as a Committee to investigate the subject and report to the society.

Dr. C. H. Mitchell was elected a member of the Board of Censors, to fill the vacancy occasioned by the death of Dr. Charles J. Craythorn.

Following discussion on the subject of suitable quarters for the holding of meetings, the society having outgrown the present facilities, Drs. Schildkraut, Scammell and Sica were appointed to obtain information relative to the possibilities of making a change.

The society mourns the loss, through death, of several of its members, who, by their active participation in the affairs of the society, promul-



gated the high ideals for which the society stands, and through their wise counsel, temperate attitude and broad vision advanced the organization of the profession in the welfare of the community in which they labored; Dr. Raymond S. Seibert died February 23; Dr. William M. Stratton on March 23; Dr. Charles J. Craythorn, March 28, and Dr. Walter F. Madden, April 13, 1931.

### MIDDLESEX COUNTY

Samuel G. Berkow, M.D., Reporter

April meeting was held at Middlesex General Hospital, New Brunswick, April 22, at 9 p. m.

The scientific program consisted of a paper on "Hay-Fever", by Dr. Thommen, of New York City, and discussed by Dr. Leonard, Director of Squibb's Immunogen Laboratories, in New Brunswick.

Dr. Thommen, an outstanding authority on problems of allergy, presented his subject concisely but with an amazing amount of detail and the subject seemed to expand in scope under his capable elaboration; he vivified the subject. He developed 5 postulates which must be satisfied for a plant to be considered as an important cause of hay-fever. By means of lantern slides he illustrated these postulates, showing the plants that pollinate and whose pollen contains an irritant capable of causing symptoms of hay-fever; the importance of wind-born pollen in contrast to pollen carried by insects; the smaller pollens, capable of being carried long distances, as opposed to those greater than 50 millimicrons in diameter; the quantity of pollen in various plants satisfying the previous requirements; and those plants having a large geographic distribution. He then discussed the treatment of hay-fever by means of subcutaneous injection of graded doses of the irritant, and emphasized the danger of injecting even minute quantities into hypersensitive patients, whom he graded into 4 groups.

Dr. Leonard discussed the paper and called attention to 2 variations from the usual pre-seasonal treatment. One, which he termed the English method or "hurry-up" treatment, in which the patient is confined to bed, preferably in a hospital, and given graded doses at very short intervals, completing the treatment in 24 to 48 hours; the other consisting of injections given to hypersensitive patients at monthly intervals following the preseasonal treatment.

Dr. F. G. Scammell, of Trenton, Councilor of the Third District, who visited the meeting, related his own experience with hay-fever and inquired as to the surgical treatment of local conditions in the nasal and oral cavities.

A committee was appointed to draw up resolutions expressing sympathy of the society, to be sent to the families of Dr. Ellis, of Metuchen, and Dr. Gruessner, of New Brunswick, recently deceased. Both served their respective communities faithfully and well, and were loyal members of the County Society.

A Committee on Public Health and Public Relations was appointed. Dr. Johnson spoke of the child health conference to be held shortly and asked for coöperation of the society in this important state endeavor. The newly formed committees were instructed to present a plan for such coöperation.

The subject of by-laws governing the County Society came up for discussion, and a committee was appointed to revise the present constitution.

### MONMOUTH COUNTY

William Van Oehsen, M.D., Reporter

The monthly meeting of the Monmouth County Medical Society was held at the Garfield-Grant Hotel, Long Branch, Wednesday evening, March 25, with Dr. William K. Campbell presiding. Minutes of the previous meeting were read and accepted.

A letter was read from E. Donald Sterner, State Senator, promising his support in opposition to Senate Bill No. 155. Dr. H. Brown, of Freehold, moved that a letter of thanks be sent to Mr. Sterner; seconded by Dr. Slocum, and carried.

Dr. H. Brown, of Freehold, reported that the old minute book had been bound. It was voted that the cost of binding the minute book (\$5) be paid.

Drs. William Matthews, Frank Niemtzow, George S. Reynolds and Morris Woronoff were elected to membership.

Dr. Campbell announced that the Woman's Auxiliary is to hold a meeting on April 7, and urged members to assist in promoting attendance.

An extremely interesting talk was given by Dr. Byron Blaisdell on "Urologic Conditions".

A buffet lunch was served.

### OCEAN COUNTY

Eugene G. Herbener, M.D., Reporter

The Spring Meeting of the Ocean County Medical Society was held February 24 at Murray's Log Cabin, Lakewood, with Dr. Adolph Towbin presiding. The following members were present: Drs. Adolph Towbin, Abraham Goldstein, Alfred Woodhouse, Frank Brouwer, V. M. Disbrow, Harold Disbrow, Robert Buermann, Herbert Willis, J. Hilliard, Frank Denniston and Eugene Herbener.

Applications for memberships were referred to the Committee on Membership. The President appointed Dr. E. G. Herbener, Reporter, to fill the vacancy caused by the death of our fellow member, Dr. Geo. W. Lawrence. A committee consisting of Drs. Frank Brouwer and E. G. Herbener was appointed to draw up resolutions on the death of Dr. Lawrence. (See Obituary Section, this Journal).

The guest speaker of the evening was Dr. George N. J. Sommer, President of the State Society, who spoke on the benefits to be derived by members attending their County, State and A. M. A. meetings, which tend to create a better fellowship among the members. He touched on "State Medicine", the New Jersey Workman's Compensation Law, and made some complimentary remarks about the Woman's Auxiliary to the Medical Society. He also expressed his opinion freely on matters concerning the county societies, as it has been his pleasure to visit each of the County Societies during the past year.

### PASSAIC COUNTY

Wayne W. Hall, M.D., Reporter

The regular meeting of the Passaic County Medical Society was held at the Health Center, Paterson, April 9, at 9 p. m. Dr. Carlisle pre-

sided. The minutes of the March meeting were approved as read.

The application of Dr. Francis Palmer, of 27 Monroe Street, Passaic, was received and referred to the Board of Censors.

The paper of the evening was presented by Dr. William C. White, Attending Surgeon at Roosevelt Hospital, New York City, on the "Diagnosis and Treatment of Breast Conditions", and was illustrated by lantern slides and moving pictures.

Considerable discussion was carried on by Drs. Leon De Yoe, Thomas Dingman, William Spickers and David Polow. It was stressed that in chronic cystic mastitis, pain is of little diagnostic value. The condition is likely benign if lumps are multiple. In lymph obstruction, the Condonian operation is a failure because the scar is too near the arm pit and all patients have some postoperative edema.

Theoretically the ideal thing to do is to block off lymph by x-rays. One month is required for proper effect in this treatment. As to infection in the breast after this procedure, it does not favorably influence the result.

Simple mastectomy was conceded the indication in the ordinary bleeding nipple. Propaganda, it was felt, influences procedure, but if a small lump is found it should be removed.

Multiple cystic mastitis warrants simple mastectomy, as there is more irritation from numerous scars than from simple mastectomy. Dr. White also stated that in 20% of cases with the Halsted incision, skin graft is done, the arm being placed in abduction 3 to 4 days after operation to prevent edema.

#### SALEM COUNTY

William H. James, M.D., Reporter

The Salem County Medical Society met at the Memorial Hospital, in Salem, on Wednesday, April 8, at 2 p. m. The meeting was called to order by Dr. Frank Perry. The minutes of the last meeting were read and approved.

The speaker of the afternoon was Dr. B. L. Fleming, of Jefferson Medical College. His subject: "Diagnosis of Acute Abdominal Lesions". He gave a very interesting talk about the different abdominal lesions, such as appendicitis, duodenal ulcer, and peritonitis.

This paper was very ably discussed by Dr. George N. J. Sommer, President of the New Jersey State Medical Society, who went into details, as did some of the other members of the society.

Dr. Morrison, Secretary of the State Society, read a paper on "State Medicine"; and Dr. Reik, gave one of his usual interesting talks.

Dr. Edward R. Prigger, of Pennsgrove, was elected a member of the society.

The next meeting will be held at the Country Club where we have our famous planked shad dinners about the middle of May.

#### SOMERSET COUNTY

J. L. Young, M.D., Reporter

The bimonthly meeting of the Somerset County Medical Society was held at the Nurses' Home of Somerset Hospital, on April 9, Dr. E. G. Brittain presiding.

The meeting was held in the evening for the first time in many years to see if it would increase attendance. There was an unusually large attendance; so a motion was made and passed that the next meeting be held in the evening at the same place.

In the absence of the chairman of the committee on collection of fees for compensation work, the secretary read the report of the committee. Motion made and passed that the secretary have copies of report printed and mailed to each member of society.

Dr. Avidan, of the referee's court, read an interesting paper on "Methods of Collection of Compensation Bills".

The meeting was also attended by Dr. George N. J. Sommer, President of the Medical Society of New Jersey, and Dr. F. G. Scammell, Councilor for the Third District; brief talks were made by these visitors.

Dr. Henry O. Reik, Editor of the Journal of the Medical Society of New Jersey, and Dr. J. Bennett Morrison, Secretary of the New Jersey State Medical Society, were also present and made short addresses.

#### UNION COUNTY

Russell A. Shirrefs, M.D., Reporter.

About 80 members attended the regular quarterly meeting of the society at the Elizabeth General Hospital on the evening of April 8. Dr. M. Vinciguerra, who presided, introduced the guest speaker, Dr. Herman O. Mosenthal, Professor of Internal Medicine at the New York Post-Graduate School. Speaking eloquently, without manuscript, Dr. Mosenthal lectured on "The Diagnosis of Bright's Disease", and explained in detail the pathology of the nephritic kidney, impaired renal function, edema, anemia, hypertension and uremia; carefully considering the significance and interrelation of the above symptoms. Discussion was opened by Dr. H. R. Livengood, who was followed by Drs. Wilson, Stern, Banker, Shirrefs and others, who asked questions which Dr. Mosenthal answered.

One resignation was accepted on account of removal from the state; 5 were proposed for membership, to be voted on at the next meeting; the following were elected: Drs. Frederick Hnat, George Ladas, Charles Ferguson, all of Elizabeth; and Gordon A. Stephenson, of Summit.

An enjoyable collation served by courtesy of the Hospital was followed by a pleasant social hour.

#### Summit Medical Society

William J. Lamson, Secretary

The regular monthly meeting of the Summit Medical Society was held at Wallace Pines on Tuesday, March 24, with President Smalley in the chair, and Dr. Krauss entertaining. There were 21 members and 6 guests present. The minutes were read and approved.

Dr. Dengler announced that the Board of Health was using a diagnostic test for whooping-cough, by means of the injection of a serum, and hoped that the members of the society would send suspected cases to him for trial of the test.



The paper of the evening was read by Dr. Krauss on "Medical Economics from the Practitioner's Standpoint". Very few enter the practice of medicine as a means of amassing wealth. The rewards of a professional career are: interest in the work itself; the opportunity to know human nature thoroughly; and the satisfaction of a useful life. But a physician has a right to live as well as his ability warrants, and to provide the usual comforts and luxuries for his family. Many factors militate against great financial returns. Preparation for his lifework is long, tedious, and expensive. His office equipment and overhead expenses are large if they are to be adequate. Vacations or illness are a dead loss. Public health activities of all sorts are continually limiting his field of action. Free clinics are abused by those able to pay. Quacks and charlatans still further attract the ignorant or gullible public. Much charity work is expected of the doctor, and worthy charity is cheerfully done.

Sound medical economics can help the practitioner to a better living. Dr. Krauss made many useful suggestions along this line. A sliding scale of varying charges, proportional to a patient's financial standing and the skill and experience required, is not only warranted but should be carefully established. Telephone calls for advice should be charged for. Night calls should cost the patient double the amount of a day call. When more than one patient is treated in the same house, an extra fee should be expected. Evening office hours are illogical and often unnecessary; no other profession holds them, and calls made at such hours should be at a higher rate. Much can be done by the physician in training his patients to be more considerate of his time.

Many other valuable suggestions as to the economic betterment of the practitioner were made.

The paper was so thoughtfully prepared and presented that there was no adverse discussion.

## Obituaries

DEMAREST, Frederick F. C., until recently dean of Passaic physicians, died on Saturday evening, March 28, at his home, 49 Willard Place, Rutherford, after a stroke of paralysis in his seventy-fifth year.

He was a resident of Rutherford from 1870 until a few years ago, and a practicing physician there since 1899. On Friday he was out in his car as usual, but on Saturday morning he spoke of being ill.

Dr. Demarest was born in Bound Brook on June 23, 1856. He was the son of the Rev. William Demarest, a Dutch Reformed clergyman, who was a native of New York, and Sarah Elizabeth Cornell Demarest, a descendant of the Freylinghuysen family of New Jersey. He was graduated from Columbia Grammar School and from Bellevue Hospital Medical College, New York. He was a member at the latter of the "blizzard class" of 1888.

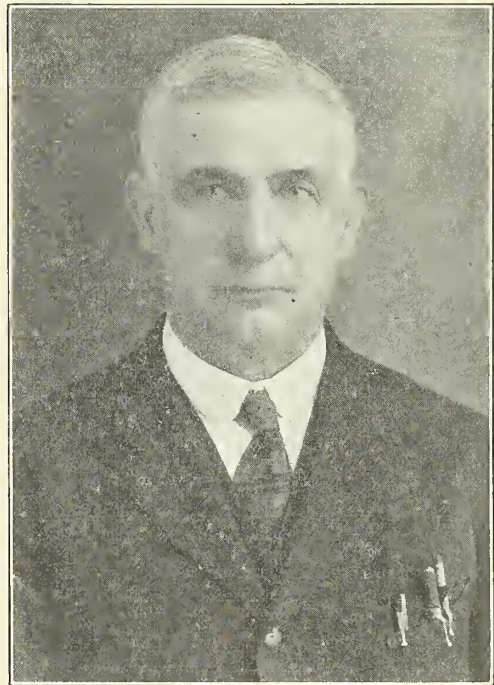
He was a member of the American Laryngological, Rhinological and Otolological Society and of the American Board of Otolaryngology, besides the American Medical Association and the Passaic City Medical Society. He was noted for his invention of several surgical instruments, the most notable of which is the Demarest tonsillotome.

## Resolutions Adopted by the Ocean County Medical Society

"WHEREAS it has pleased Almighty Providence to call by death from our professional circle, Dr. George W. Lawrence, a member of the society for 24 years,

BE IT RESOLVED that we hereby give expression of our sorrow at his departure, and do honor to his memory.

Dr. George Washington Lawrence was a graduate of the Yale Medical College and Chief of Staff of the Paul Kimball Hospital, Lakewood, N. J. He died at his home in Lakewood, of a stroke of apoplexy, while he was recovering from a 6 weeks' illness from toxic poisoning.



DR. GEORGE W. LAWRENCE

Dr. Lawrence, who was 61 years old, was a former President of the Ocean County Medical Society and was nationally known in medical circles. He was considered dean of surgeons in this part of the state and was also well known in business circles, having been Vice-President of the Lakewood Trust Company and of the First National Bank of Lakewood. He was Founder and President of the Ocean County Building and Loan Association. During the World War he was a Major in the New Jersey State Militia and directed the medical work, following explosion of the Gillespie Ammunition Plant, at Morgan, N. J., when South Amboy and Perth Amboy were devastated.

He was born at Roxbury, New Hampshire, on April 2, 1869, and has lived in Lakewood 24 years. His wife died 7 years ago. Two daughters, Mrs. Walter Brown, of Lakewood, and Mrs. Russell Scott, of Plainfield, N. J., survive. He was a member of several lodges, including the Lakewood

Masonic Lodge and of Saloani Temple, I. A. A. O. M., of Newark, N. J., also a member of the Lakewood Rotary Club and Surgeon for the Central Railroad of New Jersey for many years.

Frank Brouwer, M.D.,  
Eugene G. Herbener, M.D.,  
Committee on Resolutions.

OSMUN, Louis Cook, of Hackettstown, died at the Dover General Hospital, Monday, March 30, 1931, after a brief illness with multiple abscesses of the spleen.

He was 66 years of age, and had been practicing medicine in Hackettstown since his graduation from College of Physicians and Surgeons, of New York City, with the exception of 3 years practice in Newark.



DR. LOUIS COOK OSMUN

Dr. Osmun was born in Mendham Township and was the only son of the late Edward and Ruth Menagh Osmun.

He was chosen as head of the hospital during the small-pox epidemic in 1901. He was recognized and held offices in both the Warren County and New Jersey Medical Societies, being a Trustee of the latter at the time of his death. Besides this he was a Director of the Dover General Hospital and a member of the visiting staff. He was a member of the Methodist Episcopal Church, Dover Lodge of Elks, Monitor Council, Jr. O. U. A. M., and a charter member of the Hackettstown Club.

MADDEN, Walter, 324 South Broad Street, Trenton, died at his home, April 12, in his 58th year, of cerebral hemorrhage.

Dr. Madden was born in Tuckahoe, N. J., July 10, 1873, the son of Thomas Madden. His ancestors came to this country from Scotland and settled in New Jersey. His great grandfather,

Hosea Madden, operated in South Jersey a glass works, which was the first of its kind in America. Products of the factory were known in all parts of the world. At the death of the founder, the business was continued by his son, Hosea, Jr., who took an active part in South Jersey politics. On his mother's side, Dr. Madden was a descendant of the old Steelman family, of Pennsylvania.

The Madden family came to Trenton in 1875. Dr. Madden received his education in the public schools and the Rider Moore Business College, and then studied medicine under the late Dr. William Rice. He attended Jefferson Medical College for a time and was graduated from the College of Physicians and Surgeons, Baltimore, in 1897.

In politics Dr. Madden met with a success that would have turned the head of a man less balanced. He was elected to Common Council from the Third Ward in 1904, and in 1906 was re-elected by an increased majority. He also served 2 terms as city physician and in 1908 was the unanimous choice of the Democratic party for mayor. After a close race, he emerged as victor over John E. Gill, Republican, by a majority of 889 votes, and was later re-elected by a very large majority.

In 1900 Dr. Madden married Miss Minnie Metzler, daughter of Andrew Metzler. The former mayor was a member of Mercer Lodge, No. 50, F. & A. M.; Trenton Consistory, Scottish Rite; Crescent Temple, A. A. O. N. M. S.; Royal Order of Jesters; Tall Cedars of Lebanon; Trenton Lodge, No. 105, B. P. O. E.; Trenton Lodge, No. 164, L. O. O. M.; South Trenton Encampment, I. O. O. F.; Mercer Circle, No. 40, B. of A.; Mercer County Medical Society, and the American Medical Association.

SCOTT, George, died at his residence 9 S. Pennsylvania Avenue, Atlantic City, Friday March 27, 1931, after an illness of several months.

Dr. Scott came to this city from New York in 1903 and had practiced here since that year. He was 80 years old. Born in Illinois, he graduated from Mt. Union College, Ohio, and from Bellevue Medical College, New York, in 1871. He practiced in New York prior to coming to Atlantic City.

WEBSTER, D. King, died at his home in Leesburg, N. J., at the age of 52, after an illness of 2 weeks with pneumonia.

Dr. Webster is survived by a widow, Mrs. Janice Lee Webster. His stepmother, Mrs. Amelia Webster, is living in Philadelphia. His own mother, Mrs. Ella Webster, died when he was a child and his father, Daniel Webster, died several years ago. Dr. Webster was born in Delmont and was graduated from the University of Pennsylvania Medical School. He opened an office in South Seaville and later located in Cape May Court House with Dr. Dix. He spent several years in Kansas prior to 1912, when he came to Leesburg, where he entered into a partnership with Dr. George S. Spence which lasted until the World War, when Dr. Spence sold his share and enlisted.

Dr. Webster was a member of the Cumberland County Medical Society and a member of Neptune Lodge, F. and A. M., of Mauricetown. He was medical examiner for the public schools of Maurice River Township.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication®

Vol. XXVIII., No. 6

ORANGE, N. J., JUNE, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## ALCOHOLIC PSEUDO-PELLAGRA; REPORT OF CASES, WITH NOTATIONS ON THE ETIOLOGY

N. B. HELLER, M.D.,  
Newark, N. J.

During the hot summer months we have an opportunity of observing a number of dermatoses at the Newark City Hospital and Dispensary all of them presenting certain features in common. This has been previously described by other workers as alcoholic pseudo-pellagra. A short history of some of the cases will bring out the salient features.

*Case 1.* C. P., 39 yr. old, laborer, born in the United States, was admitted to the hospital with the following history: Out of work for the past 3 months, and his diet consisted of coffee, cake, and an occasional frankfurter; no fresh meat, vegetables nor fruit during the entire period. For the past 2 weeks has been using the average of a quart of poor gin daily, which caused a persistently upset stomach and loss of appetite. During the last few days, when the weather was hot, he slept out in the park. The last time, asleep with arms outstretched, he awoke with a burning pain in the hands and they were red and covered with blisters.

Physical examination: Poorly nourished, anemic, with dark pigmentation of the face and neck. Speech slightly incoherent, but no other mental symptoms; a slight tremor of the hands. The dorsal aspect of both hands erythematous, infiltrated, covered by a finely lamellated scaling; a few flaccid bullae and

where they had ruptured the areas were covered by thin crusts; in between, there are small islands of dark-brown pigmentation and dry atrophy. These changes are sharply demarcated and confined symmetrically to both hands and lower third of fore-arms.

Laboratory findings were entirely negative, except for a trace of albumin in the urine and an occasional cylindroid cell.

Under a generous mixed diet rich in fresh vegetables and meat he made a speedy recovery.

*Case 2.* L. J., 42 yr. old, laborer, native of Italy, admitted with the following history: Out of work for 4 months; diet very irregular and of poor quality. For the past 3 weeks slept outdoors and used cheap alcohol freely. During the last heat spell, while sleeping in the park, noticed swelling of both hands associated with a burning pain and marked redness.

Physical examination: Markedly undernourished; anemic; an anxious look in his face; tongue swollen and dark-red. Both hands and up to the lower third of the fore-arms symmetrical dark red swelling, with marked pigmentation, fine lamellar scaling with a few scabs where the skin denudation was deep.

Laboratory findings showed Hbg. 65%; otherwise negative.

Patient made a complete recovery on a generous mixed diet.

*Case 3.* A. C., 39 yr. old, housewife, native of Italy, admitted to the hospital with a negative family as well as personal history. Has always been in good health. Gave birth to 8 children; all living and healthy. Husband has



Case No. 1



Case No. 2



been out of work for some time. During the past few months diet consisted of starchy food, mainly spaghetti served in different ways. With this there was an abundant supply of home made wine. They occasionally had some milk and eggs, but the children got most of that. She does not remember eating any fresh meat, fruit nor vegetables during the entire period.

During the hot weather she has been sitting in the yard with sleeves rolled up, thus exposing arms to the direct sun. On one occasion she had a sharp burning pain in the

plus; blood sugar, 0.095; blood urea-nitrogen, 10 mgm.; blood Wassermann, negative.

*Alcohol and pellagra.* From the earliest days alcohol has played a prominent part in study of pellagra and pellagrous conditions. As far back as the days of Zeist, the European literature abounds with case histories under the name of pseudo-pellagra where no history of maize consumption could be elicited. In those cases chronic alcoholism was frequently found to be a factor.

Olo'zag describes *chichism* in Colombia as a disease clinically resembling pellagra, and by



Case No. 3

arms and noticed a few blisters, after which the arms became dark-red.

Physical examination revealed an apathetic, fairly nourished individual, with a light brown pigmentation of face and neck, but not more than would be expected of a member of the Latin race. The tongue was deep red, but no other abnormalities. The extensor surfaces of both hands, fore-arms and arms to the upper third showed symmetric pigmentation, with atrophic skin and fine flaky scaling. Some of the areas showed bright red lesions where the epidermis had been denuded.

Laboratory findings: Urine, albumin 3

many authorities accepted as such, and caused by abuse of a native alcoholic drink made from maize and called *chicha*. He believes that because of the increased use of *chicha* not enough animal protein is consumed in the diet, and we get pellagra-like symptoms. It is interesting to note that with the decreased use of *chicha* and corresponding increased intake of other foods there was a marked disappearance of the disease in the city of Medellin.

Y. C. Shattuck, reviewing 144 cases of pellagra, reports 78% as abusing alcohol.

Joseph Goldberger considers alcohol to be a chance coincidence in pellagra; one acting

mainly by causing a chronic gastritis, interfering with appetite and the proper food intake, and thus causing a decrease of protein with an increase of salts absorption. With these we must also consider the lowered body resistance caused by alcoholism.

*Light and pellagra.* Goldberger quotes Frapelli's (1771) first description of pellagra in Italy and attributes the disease to the sun

cases where the first lesions were noted on the genitalia; not on exposed parts like the hands and feet.

R. Crawston Low quotes Volpino and Rondoni as causing hypersensitiveness in pellagra patients by injection of maize extract and exposing them to the sun rays. Evidently some toxins are produced in the circulation which are activated on exposure to the sun.

#### SUMMARY

During the hot summer months we meet certain skin lesions which clinically cannot be distinguished from those seen in cases of pellagra. Without any exception all of our cases were found in chronic alcoholics who exposed themselves to the direct rays of the sun. It is quite difficult to explain these skin lesions. It is the accepted view, thanks mainly to the works of Joseph Goldberger, Wheeler Sydenstricker, and others, that pellagra is due to a dietary deficiency in animal protein-amino-acids, together with an inadequate mineral salt supply, and that unknown quantity belonging to the vitamin B complex. We can explain the skin changes in alcoholic pseudo-pellagra as due to a deficiency of the same elements in the diet, but caused by the chronic alcoholism, which acts as a food substitute, thus causing a loss of appetite and diminished protein intake. Most of the patients are suffering with chronic gastritis. Whatever food they do manage to take is not properly digested and we get a condition analogous to that found in pellagra.

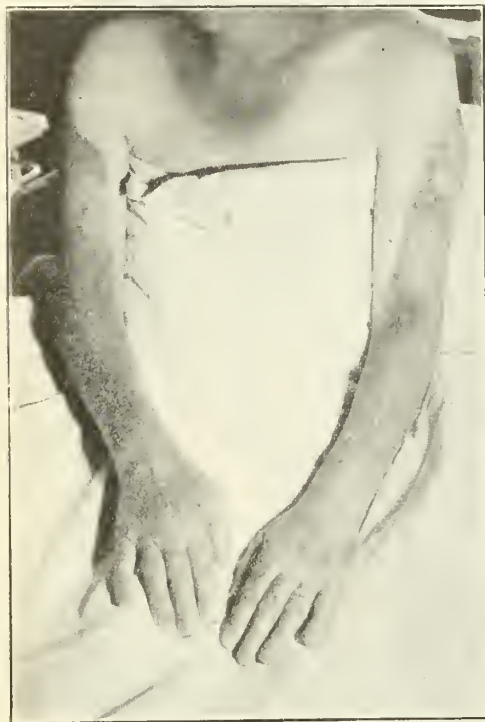
The direct sun rays act only as an exciting cause on a tissue which has been lowered in resistance by the dietary deficiency.

#### A GROUP OF ENDOCRINE CASES\*

FRANK J. T. AITKEN, M.D.,  
Bridgeton, N. J.

There are few syndromes in medicine so interesting, curious and provoking as those which are brought about by perverted functioning of the glands of internal secretion. It

\* (Read before the Bridgeton Hospital Staff, Nov. 11, 1930.)



Case No. 3

rays. Gherardini (1877) held the same view as to the sun being the causative agent. They all succeeded in producing an erythema and pigmentation of the back of hands in the pellagrous by exposing them to the June sun for a few days. These experiments certainly were not well controlled, as lesions also occur on nonexposed parts, while protection of hands and fingers did not prevent appearance of the eruption. Neusser (1887), examining markedly pellagrous children in Roumania, found the lesions confined to the hands and feet while the rest of the body showed only increased pigmentation. Goldberger and Wheeler, in experimental production of pellagrous lesions in human subjects, showed



is regrettable that in the face of so many interesting facts and cases of this sort that there is so little teaching of this important subject in the medical curricula. It is true that the exaggerated claims of commercial physicians and fanatics, who treat everything with "glandulars", have caused many of our conservative practitioners to remain skeptical, just as there are still many skeptics on the subjects of heliotherapy and nonspecific protein therapy. If common sense and sound judgment, backed by the comprehensive knowledge of endocrinology and metabolism, were applied to the administration of "glandulars", there would be few disappointments in their use, and many delights. It is indeed an easy matter to understand how many physicians bred to therapeutic nihilism, in such schools as Harvard and Yale, will become such ardent believers in endocrine therapy that they could be termed fanatics. All fanatics, however, have the best of intentions.

It is the purpose of this paper to present an unselected group of 9 cases, all of which deal with a glandular dystrophy. For convenience in discussion, I will first mention the gland involved and the name of the syndrome. It will be necessary to be brief.

*Case 1. Pituitary (diabetes insipidus).* J. M., a girl of 17, first seen on January 17, 1930, complaining of vomiting for 2 months. No pain; no nausea; the vomitus was not bilious, acid nor offensive; occurred especially on overloading stomach or under any excitement. She admitted a voracious appetite, with constipation, segmented stools, and a craving for sweets and coffee. Her speech was hurried and there was a marked tremor of the hands.

Tentatively, I diagnosed a catarrhal gastro-enteritis or possible chronic appendicitis with a thyroid imbalance of girlhood. Her diet was restricted on carbohydrates and coffee, and she was placed on tincture of belladonna in 5 minim doses, and anesthesin and menthol each gr.  $\frac{1}{2}$  t.i.d. On her return a week later she was improved in all respects; no vomiting; bowels regular; tremor slight and abdomen negative. For want of something better, I gave her Ignatia 6x, a remedy

of the homeopathic school of much value in hysteroid conditions.

Two weeks later she returned and with triumph over modesty informed me of the tremendous amounts of urine she passed. The urine, on examination was normal, even as to specific gravity. The blood sugar, urea and Wassermann were negative. The male parent submitted to the taking of a blood Wassermann, which returned 3 plus. She was placed on potassium iodide solution and mercury by mouth. When seen on September 1, 8 months after the first visit, there were no symptoms of disturbed function. She is now taking Lugol's solution 2 weeks on and 1 week off, and has not reported for observation.

*Case 2. Pituitary (enuresis).* J. E., married man, 22 years of age, first seen October 1929. Father died of tuberculosis when patient was 8 years of age—implying a tuberculous inheritance. Family history negative otherwise. Chief complaint: bed-wetting 2 or 3 times every month. Personal history negative; height, weight and nutrition ideal. No evidence of focal infection. Urine repeatedly negative. No history of excess in the good things of life. Genito-urinary examination negative; no phimosis; no prostatic enlargement.

Feeling there was little to lose in a trial of pituitary extract, and all to gain in retaining the coöperation of the patient, I placed him on capsules of pituitary body posterior lobe gr. 1 daily, with biweekly injections of 1 c.c. of the extract, and after 2 months dismissed him; requesting continuance of the gland by mouth and to keep a record of his embarrassing moments.

The patient returned in June of this year as requested, and stated that for 3 months he had been without enuresis. The dietetic bans were withdrawn, as well as the medication, and he has been instructed to report again this month.

*Case 3. Pituitary and thyroid (Fröhlich's syndrome).* M. L., American girl, 12 years of age, first under observation June 1 this year. Weight 160; pink, blooming and jolly. Her complaints were fatigue on exertion or mod-

erate walking and abdominal cramps. She started to gain weight at 10 years of age, as had her mother and her brothers in their childhood. Has menstruated since 11 years of age at irregular intervals averaging 3 weeks apart. Has complained of fatigue since the onset of her menses, which were painless and moderate in amount, and has gained decidedly in the few months before this history was taken, in spite of a sensibly restricted diet.

Physical examination revealed marked increase of fatty tissue, especially over the lower abdomen, hips and breasts. Legs were slender. Fingers long and tapering. Hands cold. Widely separated upper incisors and abnormal development of the lateral incisors. The heart and lungs revealed no pathology. Pulse rate 90; greatly influenced by exercise. The urine, blood sugar, and Wassermann, the last of which it is advisable to take in all cases of obesity not influenced favorably by diet, were all negative.

I placed her on a liberal diet and restricted all exercise. By way of medication, anterior pituitary 6 gr.; thyroid gradually increased over 2 weeks to 10 gr. daily. In 2 weeks a loss of 12 lb. was reported, and almost immediate loss of abdominal pain, which I believe was a cardialgia. The patient at this date, 4 months after her first examination, has lost 30 lb., menstruates regularly at 3 week intervals, which to be generous I ascribe to the medication, and she can enjoy longer walks without fatigue. The thyroid has been decreased to 1/10 gr. 3 times daily and there are no complaints.

*Case 4. Thyroid (thyroid asthma).* This case I shall never forget because of the fear it created and the respect for adrenalin. The patient was a girl of 14, 6 feet tall, precocious, who for more than 3 months had been subject to almost continual paroxysms of distinctly asthmatic character. On her first visit in March 1930 she stated she had been taking injections of sterile water for the asthma, but had never been treated for allergic manifestations as shown by skin tests. Closer examination objectively revealed widened palpebral orifices with a staring expression characteristic of exophthalmic goiter. Her mother had a marked unilateral enlargement of the thy-

roid. An etiologic relationship of the hyperthyroidism to the asthma, naturally suggested itself. Recalling the so-called Goetch test (which is widely used in Great Britain in differentiating toxic thyroid disease from simple goiters, by a dermal reaction and also blood pressure variations, from the injections of adrenalin), I injected 2 minims into the girl's arm and in about 2 seconds she gave what sounded like a death rattle and went cold and flaccid. I reassured the mother and carried her to the mechanical table, where treatment was rendered. In a few minutes she regained consciousness, and at the same time had the first complete freedom from paroxysms. She was placed on belladonna and Lugol's solution. A week later she returned and said she had only one spell of dyspnea which was relieved by  $\frac{3}{8}$  gr. of ephedrin. The next 2 weeks she had no attacks. She returned this November, after a lapse of over 6 months (although it was my desire to observe her at closer intervals while on such potent medication), with a history of 3 days of paroxysmal dyspnea. At this time her neck was quite visibly enlarged and tense, and speech was almost impossible. She had abandoned medication 3 months before this visit and had apparently returned to a toxic state of thyroid activity. Oral administration of antispasmodics and adrenalin was ineffectual and after waiting 40 minutes, adrenalin 2 minims was administered subcutaneously. There was a marked reaction, approaching collapse and followed by profuse vomiting. After the vomiting the patient felt relieved and breathed normally. She was again placed on belladonna and Lugol's solution with admonition to be regular in office attendance, and to the present date she has had no complaints.

*Case 5. Pituitary (myxedema and neurosyphilis).* This patient was referred to me on September 18, 1930. Fifty-four years of age, but presenile. Ocular examination revealed changes in the discs and lenses similar to those seen in arteriosclerosis, also a sagging in both upper lids, and a granular conjunctivitis. Complained of poor vision and difficulty in raising the upper lids; severe boring pains deep in the eyes, and tugging on the eyes, worse on the left. In other spheres her



chief complaints were shortness of breath, failing memory, difficulty in locomotion, particularly in the dark, and disgust with everything.

Physical examination revealed a myocarditis, subnormal blood pressure, moderate anemia, facial tics about the mouth and eyes, weakness of the grip in both hands, solid edema of the wrists and below the clavicles, sparsity of eyebrows, and a general yellow tint to the skin. Diagnosis necessitated careful consideration of the following conditions: cerebro-spinal syphilis, Parkinson's syndrome, nephritis (Bright's), pernicious anemia, and advanced myxedema with arteriosclerosis and myocarditis. I was inclined to favor the last condition, in as much as the urine was negative, there was no history of progressive wasting, and facies and gait were not sufficiently characteristic for a Parkinson syndrome. The Wassermann report had not yet been returned. On the other hand, there were several symptoms previously noted that are characteristic of myxedema. History of influenza in 1920, from which it took the patient 6 months to effect recovery, was judged to have a possible bearing on the present condition.

The Wassermann and Kahn returned positive. Treatment consisted of iodides and mercury. There is little doubt, however, that a pituitary dystrophy complicated this case.

*Case 6. Thyroid (myxedema).* S. L., a single woman 44 years of age, was well until 1927, when she was operated upon for bleeding hemorrhoids. A year ago last June she had complained of progressive weakness, dizzy spells and fainting, and increase in weight. Her menses had ceased in 1928. On her initial visit, June 1930, she stated that she had been under the care of 13 physicians since the onset of her symptoms. Physical examination showed: Maximum systolic pressure 80, diastolic 60; heart centrally placed and of normal dimensions; pulse 130, easily compressible, but regular in force and interval; chest clear and resonant throughout; no edema nor ascites; no abdominal masses; no splenic nor hepatic enlargement. Rectal examination revealed an inflamed mass the size of a large cherry with a tendency to prolapse between the external sphincters. There

was no infiltration in the wall of the rectum, but there were smaller hemorrhoids in the opposite longitudinal axis. Superficially, the patient was slightly yellow; skin was very dry; eyes muddy; face expressionless; hair brittle and sparse; hands pudgy, with thickened joints; wrists enlarged with so-called solid edema. A diagnosis of concealed hemorrhage and myxedema was made.

At this time her hemoglobin was 25%. A serious syncope attended the prick of a needle and transfusion was adjudged dangerous. Local measures were adopted for the rectal pathology, and after 1 month of thyroid extract and iodide of arsenic her hemoglobin increased to 45%, and I removed her hemorrhoids. A long and tedious recovery followed. Microscopic examination revealed characteristic pathology.

Continuing the use of thyroid with strychnin and iron her hemoglobin in another month had risen to 65%, and on November 10, less than 6 months, became 80%. Along with the increase in hemoglobin she has lost all signs of myxedema, and is a very attractive woman with a renewed interest in her music and pastimes, a complete indifference to which she had manifested for nearly 4 years. She is the daughter of the patient with trophedema whom I shall next describe. The maximum dose of desiccated thyroid given to this patient was 30 gr. a day. At present she takes a 5 gr. thyroid tablet daily and no auxiliary treatment.

*Case 7. Thyroid (trophedema).* Mrs. L. M., mother of the previous patient. In this case it is necessary to describe an unusual condition.

Trophedema is a chronic neuropathic edema occurring in segmentary distribution, associated with a hardening and pallor of the skin, not due to cardiac or renal disease. Its diagnosis is made by exclusion of other diseases which possibly could cause a similar condition of the limbs. Conditions which might require differentiation are filariasis, cardiac disease, nephritis, mechanical obstruction within the pelvis which would disturb the local venous lymphatic circulation to a marked degree, and a bacterial form of elephantiasis due to streptococcus. Lymphatic obstruction

in other cases is the result of severe or recurrent inflammation, as in erysipelas, milk-leg, or other factors. Trophedema was first described in 1898, but the pathologic basis has never been clarified. It is evident that there must be a disturbance of the trophic centers within the spinal cord. In some cases neurologic symptoms are present, such as hemiplegia and paraplegia, but this must be a coincidence, for as a rule all other evidences of organic diseases are absent. In very isolated cases it has been ascribed to traumatic origin and interpreted as developing through the mediation of an ascending neuritis which climbs up and involves the spinal ganglion, and from here to the constituents of the nearby sympathetic ganglia. Some instances of chronic trophedema have been observed in which the swelling was associated with disturbance of the ductless glands in the form of more or less acromegaly or myxedema, and that is the type of case into which my patient falls. The disease may be hereditary or congenital, the infirmity being present at birth, or it may be acquired, coming on at a variable age, usually around puberty. In any event, trophedema is to be interpreted as a familial disease. It has been noted that in cases that are hereditary, the disease is transmitted through the maternal line, and that in a general way men are not susceptible.

Mrs. M. is 65 years of age and appeared older. Her features were acromegalic; stolid expression; a general yellowish tint. She gave a history of having been treated for the past year or more for variable conditions—diabetes, myocarditis and chronic parenchymatous nephritis; the last mentioned had been the favored diagnosis. She has been on a high protein diet, and has been given urea in doses of 30 grams daily without any reduction in her edema. Has never had any ascites. Unable to walk for over a year.

On my first visit I tentatively classified her as a cardiorenal, having a great deal of respect for the opinion and therapy of my brother practitioners. However, at this time, her heart and blood pressure seemed normal. Both calves measured 20 inches in circumference at the widest portion. I continued the nephritin, also giving Niemeyer's pills, and a

Carrel diet. Four days later, on my second visit, aside from feeling stronger, she showed no other changes and had, in spite of the limitation of fluids, no increase in the amount of urine passed. It was then that I decided her condition might be trophedema, especially since I had treated her daughter for myxedema.

On the third visit, October 14, there was no change in measurements about the lower limbs, the pulse rate had not changed, and there was no noticeable difference in the general condition except rest had been better. Thyroid extract was the only medicine given at this time and that in the equivalent of 15 gr. daily of the fresh substance. Urinalysis on this occasion revealed a 2 + sugar which patient stated has been the case for many years. She has never had any diabetic symptoms, and the condition will be regarded as a nondiabetic glycosuria, since these conditions are present in myxedema. However, I omitted sugar and limited carbohydrates, placing her on a diet liberal in sea-food. On October 26, the measurement about the lower right leg was 17 $\frac{7}{8}$  inches, a reduction of only  $\frac{1}{8}$  in. She stated that generally she was feeling much better. Thyroid continued 15 gr. a day. Attempt at digitalization produced nausea on lowering the pulse to 100. On November 4, there were no complaints. Had attempted to walk, but was unable to on account of pain. Leg diameter 19 in., an increase rather than a decrease. Medication: thyroid 10 gr. and strychnin 1/50 gr. t.i.d. On November 11, the leg diameter was 17 in. and considerable burning was present in the limbs, which I thought was an encouraging sign; a decrease of 3 in. since the first visit. Continued medication. November 18 she complained of fatigue and reversed sleep rhythm. Thyroid was diminished to 15 gr. daily. Leg diameter 17 in. Solid wrist swelling entirely gone. November 26, less fatigue. Leg diameter 16 in. Medication continued.

It appears at this writing that the thyroid substance is a specific, and I am almost optimistic enough to predict that she will be able to walk within a few months.

*Case 8. Thyroid (myxedema).* M. N., married woman of 42, who is introduced because



of an indirect but interesting blood relationship to the previous 2 patients, showing maternal transmission of myxedema. This patient's grandmother, who had a goiter, was an older sister to the trophedema patient. This patient's daughter has a hyperthyroidism, although I have not yet had the pleasure of studying this daughter.

Mrs. N. was first examined on November 10, 1930. She had complained for the past 6 months of a sensation of a "fist gripping her heart", vertex headaches, dizziness on arising, extreme fatigue and mental depression. She has gained in weight. Physical examination revealed a distinct pallor, solid edema of the wrists, absence of eyebrows, deafness, and obesity. The only significant clinical finding in a complete study was a hemoglobin of 40%. Drawn to question her relationship to our previous myxedema patient, I was delighted to find such existed.

She was placed on a liver diet, thyroid extract, and iron and strychnin intramuscularly, and after 3 weeks of treatment presents no symptoms of ill-being, and shows a hemoglobin of 65%. The equivalent of 30 gr. of fresh thyroid a day was given. She has lost in that time 20 pounds.

In reviewing these and considering other parallel cases the following thoughts presented themselves:

(1) In all so-called neurasthenic and hysteroid states it is highly advisable that functional endocrine disturbances should be sought. In obtaining history along the line of endocrinology the family history should be very carefully inquired into, even beyond living generations, along the line of structural abnormalities, asocial tendencies, or peculiar diatheses. In dealing with children of any age, it has always seemed to me that a prescription given after interviewing the patient in the presence of the parents gives better results than to prescribe for the child who is unattended.

(2) In all chronic cases it should be assumed that there is a complexity to their syndrome that has defied the routine forms of treatment given by other physicians of equal or greater intelligence (I believe all of us

have a certain routine which we try first, and failing in that routine we really commence to draw out our latent talents). Therefore, I believe we should at once, in these cases, eliminate the possibility of deeply seated metabolic disturbances of physiochemic nature.

(3) In all cases suggesting endocrine dystrophy the possibility of syphilis should be eliminated.

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### SINUSITIS\*

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E. S. HALLINGER, M.D., F.A.C.S.,

Camden, N. J.

When asked to present a paper on some pertinent subject incidental to the season, it followed that as the "common cold" is more or less in the limelight of present day scientific investigation a complication of it would be a fitting and appropriate subject to discuss. You all know what sinusitis is, yet, like the old saying that "familiarity breeds contempt", this very familiarity is often responsible for our negligence to recognize self-evident facts, and in the hope that some of you have acquired this mental attitude I presume to present this so common condition for your consideration:

Briefly, sinusitis is an inflammation, either acute or chronic in type, affecting the accessory nasal sinuses. These, as you know, occur in groups of 5, namely, the frontals, anterior ethmoids, posterior ethmoids, maxillary antrums and the sphenoids. Each of these sinuses has direct communication with the nasal fossa by individual ostei, and, anatomically, all are in direct relationship with each other. Any or all of these cells may be involved at the same time, either as a bilateral, unilateral or unicellular infection, which primarily may be induced by the following causes, which for the sake of convenience may be divided into 2 classes—local and general. Under the first group we have the mechano-physical conditions, e.g., nasal obstructions, due to deflected or deviated septums, hypertrophied turbinates, spurs, polyps, new

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\* (Read at the Camden County Medical Society meeting Dec. 2, 1930.)

growths or abnormalities of the nasal walls or bony structures; while under the second group we have the acute infections.

While it is true that an acute sinusitis may occur without apparent, generalized, systemic manifestations, it generally is the result directly or indirectly of an acute infective process, or a complication of the same. Heading this list is influenza, which produces about 75% of all the cases, depending upon virulence of the epidemic. Next in order of frequency come pneumonia, typhoid fever, scarlet fever, measles, erysipelas, diphtheria and cerebrospinal meningitis. Of the acute infectious diseases scarlet fever takes the lead and is usually more virulent in that the pathologic process is more destructive, even involving the bony walls of the sinus cavities, with an ensuing involvement of adjacent parts.

Bacteriologically, practically every case of sinusitis is of the mixed type, although the influenza bacillus is frequently found alone. The most common organisms, in addition to the influenza bacilli are the pneumococci, meningococci, various varieties of staphylococci and streptococci, and to a lesser extent the colon bacillus and the diphtheria bacillus. Any or all of these occur in single or multiple combinations, producing different types or degrees of infection, the virulence of the latter varying with the types of combinations.

It is not my desire to present sinusitis in all of its many phases, as this would be a tremendous undertaking, and an impossibility in the time allotted, even if considered in but a superficial manner, but rather to consider it from a single standpoint, namely, that of the "acute type". This develops as the result of an acute rhinitis or common head cold, or as a part of the symptom complex of one of our acute infections, the degree of involvement depending upon: first, the *nose affected*; and, second, the *type of infection*.

It is primarily essential that we have some nasal pathology before we can have a sinus infection, and upon this factor also depends the degree or acuteness of the disease; the greater the obstruction, the greater the susceptibility of the patient to involvement. Likewise, the symptomatology varies with these factors. The most pronounced symptom, ex-

cluding of course a generalized entity such as influenza, typhoid fever or pneumonia, is headache. In fact, headache can be looked upon as being the first symptom of sinus involvement which follows a train of other preliminary complaints, and it is of any type imaginable, both as to site and character; it may be spasmodic or constant; neuralgic or hemi-cranial, and violent to such a degree that the patient is beside himself. It may begin first as a dull ache which, however, gradually increases in severity, and usually is present over the site of the trouble—particularly if the frontal sinuses are involved; in which case it will be referred to the supra-orbital ridge or to the nasal side of the orbit; or, if the posterior group of cells is affected, we may simply have a generalized type or the lower-half headache, as described by Sluder, with or without ocular manifestations, such as deep orbital pain, photophobia and involvement of the ocular muscles.

What are the mechanics of sinusitis? We stated that the degree of involvement depended upon the ratio of nasal pathology rather than upon the offending organism. One can readily conceive that where the nasal fossa is markedly narrowed or where the parts are in close proximity to each other, as soon as the mucous membrane of this fossa is congested how quickly the resulting edema will produce occlusion. It is but a step forward to imagine what next occurs. As soon as engorgement and edema have taken place there is an immediate blocking of the nasal orifices of the sinuses, particularly those of the frontals and the ethmoids, with the result that ventilation of these cavities is arrested. What happens? There immediately ensues an absorption of the residual air in these cells, and as the absorption continues a vacuum results; the greater this becomes the more pronounced and severe will be the headache. In addition, there is an increased flow of mucous secretion which bathes the parts in excessive moisture, heat is created and all air circulation is shut off. What do we then have?—An ideal incubating chamber.

It is not necessary to take up your time with the mechanics of the ensuing pyogenic process; suffice it to say that this is the next



procedure, and, depending upon virulency of the infection, may occur in a few hours or within 2 or 3 days.

Then is the time when, in addition to general symptomatology, the local evidence of sinus involvement appears; likewise varying with the type of infection present, representing all degrees or phases of the pathologic process from a simple benign condition, particularly when local nasal obstructions are in the minimum, to the severest type met with, and usually these are the cases that present evidence of the greatest amount of mechanical obstruction. Headache, of course, is present, as previously mentioned, and at first is produced by development of the vacuum and later by the damming up of secretion and by the establishment of contacts.

Local symptoms vary with the sinus involved; particularly true in cases of unicellular sinusitis. For example, if the frontal is the particular one, our local signs are directed to it. These, in order of their occurrence, are pain, tenderness, swelling and hyperemia. The pain may be supra-orbital or may only be referred to the nasal side of the orbit, or may include both areas at the same time. Pain naturally increases in severity as the disease progresses, while tenderness of the orbital plate of the ethmoid may indicate an extension of inflammation to the ethmoid cells. As swelling develops, generalized pain and tenderness are found, particularly when hyperemia enters into the picture. This edema usually affects the eyelid and the conjunctiva. In addition to these evidences, we have at first a fluent nasal discharge, which sooner or later becomes purulent, the amount flowing being dependent upon the drainage facilities and upon the nasal obstructive pathology. Where other than the frontal sinuses are diseased, external evidences may be lacking. Diagnosis then depends upon other signs. It is in this acute stage, however, that immediate active measures should be instituted; otherwise serious and even fatal complications are apt to rapidly occur, with all of their concurrent symptoms. These include, as the result of a damming up of pus and increased intrasinus pressure, empyema and a generalized pansinusitis, with an osteitis of the sinus walls,

which, ultimately eroding, permit rupture, either into the orbit, with the formation of an orbital abscess, or, the rupture may occur through the cribriform plate via the olfactory nerve openings, producing meningitis and brain abscess. Optic neuritis and cavernous sinus thrombosis are apt to be the particular complications if the sphenoids are included in the pathologic process; while if the frontal sinus is destroyed, in addition to rupture into the orbit, we may have a progressive osteitis of the inner wall of the sinus with a breaking down of the same, development of a meningitis and brain abscess; or, instead of breaking directly through to the brain covering, a suppurating, progressive osteitis may extend through the entire cranium, creating multiple pyogenic abscesses. This infection travels through the diploic veins and may rupture anywhere over the meninges, likewise resulting in multiple brain abscesses or a purulent meningitis.

What are we going to do with these cases? The first essential thing is, naturally, to create ventilation, open up the nose and establish or permit drainage. This holds good in any phase of the disease and is particularly indicated before sinusitis actually begins; i.e., in the stage of congestion or hyperemia.

How can this be accomplished? By using a shrinking agent that will deplete the engorged or turgescient mucous membrane, and the best agent in my experience is a 10% solution of cocain. Some prefer adrenalin or ephedrin, alone or in combination; be that as it may, the essential thing to do is to shrink the mucous membrane, and if this is done early, an attack may be aborted. If seen later, it will occasionally also be necessary to use suction, but this must be done with care as we will accomplish nothing if our vacuum is great enough to pull out the mucous membrane of our sinus. Following the shrinking, use of a 10% solution of argyrol on cotton tampons is indicated. To be effectual these should be placed as high up in the nasal fossa as is possible and allowed to remain for at least a half an hour. It is remarkable how quickly the flow of secretion is started when these tampons are applied, and more particularly upon their removal the amount of relief obtained from their use.

Naturally, the amount of secretion removed depends upon the degree of pathology present. It is also permissible, following the use of the argyrol tampons, to make light suction followed by a soothing, oily spray. There are some cases, however, which should be irrigated. This also depends upon the sinus involved, and if the antrums are involved and empyemic, they should be punctured and irrigated. Treatment will only be of use if our patient has not an excessive degree of nasal obstruction. If such exists it is frequently necessary, and imperative, that these deformities and obstructions be removed before treatment can be undertaken. Many times a radical operation upon your patient can be avoided by having taken care of the nasal pathology. However, in spite of what we do, either conservatively or surgically, we reach a point where every radical measure must be used if we are going to save our patient, and occasionally they die in spite of our efforts.

I have avoided going into a description of the basic pathologic processes and likewise have omitted reference to age limits; but I would like to say, in conclusion, that children are more prone to sinus involvement than is naturally suspected, and that all stubborn head colds in children should be investigated. There are many other factors to be considered, but these will depend upon the type of condition which was the underlying cause of the sinus involvement and need no particular mention here.

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### ONE YEAR OF NEUROLOGIC SERVICE AT ST. PETER'S GENERAL HOSPITAL IN NEW BRUNSWICK, NEW JERSEY

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During the last 2 years of existence of the old St. Peter's Hospital, I had tried to install a neurologic consultation service and, in the course of time, had found that this service was not only a convenience but soon developed into a necessity, especially since, at the same time, we had started a neuropsychia-

tric clinic, the attendance of which grew with time.

When our new 200-bed hospital was finished a year ago, the staff found it proper to create a full neuropsychiatric service which takes care of 3 functions: (1) The neuropsychiatric ward service; (2) consultation with other services; and (3) neuropsychiatric clinic.

The 1 year of existence has proved so successful that I feel it not out of place to record what we have done, because it is my belief that such a service could be easily arranged in any community the size of New Brunswick. I feel sure that some member of the staff in every community hospital is especially interested in neuropsychiatry and could take charge of such a department. The nearness of New Jersey to medical centers, besides, will help to obtain consultation service whenever necessary. It is a well known experience that for no other kind of service does the public run oftentimes to far-off places, as they do with neurologic or psychiatric problems. This fact is due to a certain indifference of the profession toward those problems which consume a great amount of time and yet, in the end, often turn out unsatisfactorily. Every qualified hospital certainly should be able to take care of the neurologic (with possible exception of the neurosurgic) and a large number of the milder psychiatric cases.

When looking over the records of the hospital, we see that a great number of such cases had always been admitted. Many neurologic cases had been handled by the medical service, without consultation. The surgeons would frequently have liked to call in a neurologist if only the expense had not been too great. Many psychoneurotic patients had been admitted and kept for a while, only to be shipped away later to an insane asylum.

Let us consider the 3 types of service.

(1) *Ward service.* The neuropsychiatric service in our hospital has been established within the group of medical services but as a separate unit, just as the pediatric service. That means that we have admitted to this service all patients whose chief complaint was on a neurologic basis, and we have made this a matter of classification. Thus, a case of



tabes dorsalis is admitted to the neurologic service. If during stay in hospital a medical problem arises in this case, the medical service is called into consultation. If, however, a tabetic patient comes in complaining of trouble pertaining to the medical field, he is admitted to the medical service and the neurologist is called into consultation. In this way, our service has been very successful.

We have seen and treated a large number of the milder neurologic and psychiatric problems but, on the other hand, we have also had occasion to observe a great number of rare cases, the diagnoses of which presented us with great difficulties. Let us just mention the following types: occlusion of a branch of a vertebral artery; traumatic pontine concussion; acute multiple sclerosis; streptococcic meningitis; meningitis following a brain abscess and caused by *Bacillus mucosus capsulatus* (Friedlander's bacillus); Foville's paralysis; poliomyelitis anterior, superimposed on syringomyelia; tumors of the cerebellum, 2 cases; tumor of the thalamus; pituitary tumors, 2 cases; general paresis with syphilitic disturbances of the circulatory system; and others.

Thus, it will seem that the diagnostic and therapeutic possibilities of this service have proved their value, even within 1 short year.

(2) *Consultation service.* Quite often has this service been called in consultation by the medical service in cases where neurologic or psychiatric problems arose. I remember specifically a case of indefinite pain in the pelvic region, which proved to be a pluriglandular disturbance and cleared up under proper medication. We had a patient with chills, resembling malaria, whose trouble afterward turned out to be Korsakoff's psychosis. We had another case of Korsakoff's psychosis, which originally made us suspect sinus disease and which cleared up and the patient has been healthy since. We have seen a great many minor cases of hysteria, and especially a large number of apoplexies where the medical aspect of the case was the prominent one, and we were called in to determine the neurologic status of the case.

We considered of special importance our consultations with the surgical services. Here,

we had the opportunity to see a number of brain injuries in which it was advisable to make a definite, topical diagnosis as well as a prognosis. Several times it was a matter of differentiating between a central or peripheral disturbance that caused the surgeon to call our service in consultation. I remember one of those rare cases—a brain injury causing a flaccid paralysis, instead of the expected spastic one—where the patient was worried and our assurance that within a few weeks the paralysis would become spastic was of great mental and moral help to the sufferer. In another case where there had been a head injury, caused by an automobile accident, we were called in for the reason that there was flaccid paralysis of the arm with motor deficiency, and which we could clear up by diagnosing a subcortical lesion; and flaccid paralysis and apraxia will remain permanent symptoms, accompanied by motor aphasia and motor alexia, without disturbances of the sensory functions. There were cases where a neurologic status after peripheral lesions was necessary, and here I remember a case where an apparently harmless injury to the shoulder had caused complete paralysis of the brachial plexus. There were other cases in which a concussion of the brain, without fracture of the skull, was the sole injury, and where the question of permanency of symptoms had to be decided.

(3) *Neuropsychiatric clinic.* In this clinic we have seen many more neurologic cases than straightforward mental ones, and a number of the cases referred to in this review of the ward service were originally admitted through the clinic. This fact may be due to the presence of a State Psychiatric Clinic in our city. We have felt that although this state clinic was established we should not abandon the psychiatric part of our clinic because: (1) We feel that handling of the average patient is not a matter for the state but for the community or the hospitals; the state should confine itself to the treatment of definitely insane patients and not take up treatment of psychoneuroses, and patients who do not need hospitalization. (2) The state clinic psychiatrist can see a patient only once a month, and one does not need much imagina-

tion to figure out that this is not sufficiently frequent for proper treatment. Our clinic is held once a week, but it is possible to have practically continuous service.

A number of school children with mental defects have been referred to us. The New Brunswick city school system employs a psychologist who gives advice to the special classes and classifies the children. It is a common experience that the classification by method of the Intelligence Quotient is very unsatisfactory, and all the teachers of such classes will agree with this statement. Besides, many children with an I. Q. of 100, or even higher, show defects in behavior and emotions which can only be handled by a psychiatrist. This is the reason why the number of those children was so considerable. We have diagnosed a number of them as glandular disturbances and some experiences of ours with thyroid deficiency cases have been extremely satisfactory. We have seen another series of children who were suffering from infected tonsils, obstruction of the nose, sinusitis, umbilical hernia, and other such "minor" troubles, who were definitely benefited by removal of these impediments. We have been frequently in consultation with the pediatric and eye, ear, nose and throat clinics. In the organic neurologic class, we have seen cases of paralysis agitans, paralysis following apoplexy, epilepsy, postencephalitis, and tremors of various origins. I especially remember a child of about 14, with continuous shaking of her limbs and body, certainly a case of postencephalitis, who had gone to a number of agencies. She improved greatly under administration of proper medication.

This clinic has also been an excellent means for the interns to see neurologic cases, as well as for the nurses, who in a general hospital usually have no opportunity to see patients of this type.

It should also be mentioned that the writer gave weekly lectures to the seniors of the nursing school and that the nurses benefited greatly by the possibility of actually seeing cases of the various types, neurologic as well as mental, during the lectures, and at any time when such patients were admitted to the service the nurses could be called together for

a "clinical conference". It may also be mentioned that the superintendent of the nurses' school asked the writer to give the probationers a few introductory lectures on "every day psychology, and the psychology of nursing problems".

The hospital authorities have been very co-operative in helping us to establish and maintain this service. They have gladly admitted milder mental patients who did not need special supervision. They have provided us with the necessary neurologic apparatus, but, above all, they have shown acknowledgment of the value of this service and done their good share in improving it, especially by classifying the service in its proper place and giving it a standing with the other services.

Looking back over the first year of this service, we have reason to be very well satisfied. This will not say, however, that satisfaction means stagnation. There are many problems to be solved. There are some of the more complicated pieces of apparatus to be installed. We are, at the present time, without a high-type perimeter, and we have not the possibility of using a permanent water bath. Those things, I am sure, will come within the near future.

Outside of these mechanical features, there is one field in which, in my opinion, the service is not yet called in frequently enough. These are the cases of head injuries. We feel it should be the rule that any head injury admitted to the surgical service should be seen by a neurologist if, as is the case in our hospital, there is no special neurosurgic service at hand. The greater number do not present a serious surgical problem, most of these cases being concussions accompanied by scalp wounds. It is sad to say that most of the severe injuries of the brain are beyond medical help anyhow, but in the remaining class mentioned a neurologist ought to be consulted, especially in order to determine the amount of permanent injury before the patient leaves the hospital; this is especially important in compensation cases. We have lately had 2 patients who had been properly diagnosed as having concussion of the brain, who had been discharged, but who had not been able to work. Both were considered



hysterics who did not want to work. In both cases, we found definite organic disturbances due to multiple and diffuse hemorrhages in different parts of the cerebrum.

This paper has been written with one idea in mind: to demonstrate that a neuropsychiatric hospital service in a community like New Brunswick is a possibility when the necessary coöperation between members of the staff and the hospital authorities is so well established as at St. Peter's Hospital.

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## INDICATIONS FOR SURGERY IN DISEASES OF THE THYROID\*

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In treating diseases of the thyroid gland, various methods are employed, from doing nothing to the use of iodine, glandular extracts, radiotherapy, and operation. Surgery probably has a wider application than any other single form of treatment, being called upon in the infections, tumors, and some of the disturbances in physiologic function.

*Infections.* Acute infections of the thyroid gland may appear with any of the acute infectious diseases due to a streptococcus, but usually they are associated with a generalized pyogenic infection presenting abscess formation. Sometimes the infection will be localized, appearing in a small abscess, but at times the entire gland is replaced by a bag of pus. All of these cases should be drained, but the more fulminating type is associated with an extremely bad prognosis.

In the chronic infections, syphilis and tuberculosis are occasionally encountered. The former is, of course, nonoperative; the latter, when discrete and localized, requires removal. However, the diagnosis of tuberculosis of the thyroid when it appears as a localized condition is almost never made. These cases are frequently operated on for a suspected adenoma of the thyroid, with the true condition

not being found until microscopic examination of the specimen has been made.

The one chronic infection peculiar to the thyroid is the iron-hard struma, first described by Riedel in 1896. This condition is characterized by a marked replacement of glandular elements of the thyroid by an extremely hard, dense connective tissue with a scattering of lymphoid tissue throughout the tumor. Hashimoto, in 1912, described a condition in which he noted a marked increase in the lymphoid elements with production of huge germinal centers and a decrease in the glandular element. It is thought that the condition he described represents the early stage, and that described by Riedel the end stage of the same process. The symptoms caused by the swelling due to this marked increase in connective tissue are mechanical in nature. Encroachment upon the lumen of the trachea, and fixation of the latter, interfering with the rising of the thyroid cartilage during swallowing, cause dyspnea and dysphagia, which, with a visible swelling, represent the main symptoms complained of.

The main indication for surgery is relief of tracheal obstruction. This may be obtained by removal of merely the isthmus, but at times a partial thyroidectomy is necessary to decompress the trachea. As little as possible of the thyroid should be removed, because there is a tendency for the condition to subside, leaving the patient in a somewhat sub-thyroid condition in most cases. This may require the use of thyroid extract for a period of time, so that it is most desirable to leave as much of the gland as is possible.

*Neoplasms.* Malignant neoplasms of the thyroid gland represent an incidence of about 2% in the surgically treated cases. Some clinics report a considerably higher incidence, and a correspondingly higher ratio of successful operations. One suspects that many of the virulent-appearing, so-called fetal adenomas, which are absolutely benign lesions, have been included, being mistaken for carcinoma. The malignant neoplasms seen are carcinoma, sarcoma, and malignant thymoma. The latter 2 types are relatively rare and are highly fatal. A fair percentage of carcinomas are found while still within the

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\* (Read at meeting of the Morris County Medical Society, December 18, 1930.)

capsule of an adenoma, and 94% of cases with carcinoma have a history of previously enlarged thyroid. When this condition obtains, partial thyroidectomy offers an excellent chance of cure. When the malignant change is found diffused through the gland, even though it may not be obvious beyond the capsule, the prognosis, even with complete thyroidectomy followed by radium or x-radiation, is poor. To put it another way, if the diagnosis of malignancy of the thyroid can be made before operation, the prognosis is bad, but if cancer is found on microscopic examination after an adequate operation for adenoma, the prognosis is reasonably good. Fortunately a fair percentage of cases with very hard, nodular glands that have caused pressure symptoms, may have their hardness due to calcification, so that a mistake in the good direction is easily made in what appears to be carcinoma. Sometimes this calcification is relatively diffuse, and in such thin layers that a radiograph of the neck does not clearly indicate the true nature of the condition.

*Adenoma.* One of the extremely interesting conditions from both a theoretic and practical standpoint is the group of cases under the diagnosis of adenoma of the thyroid, whether with or without hyperthyroidism. These are the nodular goiters, and there has been considerable discussion as to their etiology. Some believe that they arise from cell rests present in the embryonic stage, the so-called "cells of Wolfer", cells similar in all respects to the other embryonic thyroid cells but not participating in the ordinary formation of acini. This theory visualizes these isolated groups of cells as living and growing to produce, in one or more regions of the thyroid, masses of tissue which in their ultimate form may present a cellular arrangement similar to that found in a normal thyroid gland at any stage from the earliest embryonic to a completely adult form, even to a degenerative form of the latter. One does find adenomas in which the cellular arrangement may be a solid grouping of thoroughly fetal cells, an arrangement in cords, tubules, or small acini, the presence of definite adult acini, cyst formation, and lastly, calcification. All of these are quite definitely changes

through which the thyroid cells pass from their earliest form as they grow downward from the tuberculum impar through the muscles of the tongue to attain their eventual site and adult arrangement in the lower part of the neck.

The other theory as to their formation takes into consideration the fact that the thyroid gland increases its activity in response to any energy demand, with a resolution to the resting stage after the energy demand has been satisfied. In certain individuals elasticity of the thermostat, as it were, is deficient, with the result that in areas groups of acini do not revert, but persist in a hyperplastic state. For a period of time this hyperplastic state is more morphologic than physiologic, resulting in the persistence of one or more areas of enlargement, which, when it has occurred numerous times, produces a nodular goiter. Eventually, persistence of physiologic over-activity appears, and one then has a persistence of hyperthyroidism which proceeds until the clinical picture of the disease is in evidence. I find it hard to believe that this latter theory covers all of the microscopic findings, and feel that in all probability both methods obtain. Certainly the latter theory covers those cases in which development of symptoms follows tonsillitis, pregnancy, prolonged mental strain, psychic trauma, and the various other occurrences frequently associated with the onset of symptoms of hyperthyroidism. This will ascribe an exciting rather than etiologic importance to these various strains; which is reasonable in that all individuals are exposed to one or more of these strains, and yet only a relatively small percentage of individuals exhibit pathologic or physiologic thyroid changes.

The group of adenoma cases without hyperthyroidism may require surgery. Certainly on the Atlantic seaboard the use of iodine is unsatisfactory in individuals over 20 years of age. X-ray treatment has no effect upon the size of these masses, so that if anything at all is done it must be surgical. A few years ago, several articles appeared upon the danger of so-called iodine hyperthyroidism, namely the development of hyperthyroidism in an adenomatous gland consequent upon the



use of iodine. In my opinion, such a circumstance is entirely coincidental. So many individuals have received iodine on the advice of friends, druggists, advertising companies and doctors, that it is not at all surprising to find a fair number in whom symptoms have apparently developed during the administration of iodine. The earliest symptoms of hyperthyroidism in a patient with an enlarged thyroid of many years' standing might easily be worry over the goiter, and medical or other advice would be sought. Iodine would be taken, with control of the symptoms for a period of time. Escape from control of the iodine would then ensue, and there would be an apparent development of symptoms consequent upon the use of iodine. It also seems absurd that the same substance would cause and help the same group of symptoms. We do not use iodine for the nontoxic nodular goiters, not for fear of damage but because it would do no good. There are 5 reasons for operation: cosmetic, worry, the presence of tracheal obstruction, or even deviation, whether due to enlargements above or below the level of the clavicles, the likelihood of the development of hyperthyroidism, and the likelihood of the development of carcinoma. In young individuals with inconspicuous enlargements, I believe it is safe and wise to do nothing. In these cases the cosmetic effect, worry, and pressure considerations do not appear, and the likelihood of hyperthyroidism and carcinoma can safely be considered as remote. Also, following pregnancy or other energy demands, there is apt to be an increase in size in the small, impalpable masses which would be apt to make their definite appearance following operation; and if operation is postponed at least 1 operative procedure may be avoided. In older individuals who have gone through pregnancies and other tests, one can perhaps consider that no further masses are liable to appear, and that they are nearer the possible development of hyperthyroidism of malignancy.

The large, prominent nodules present no need for delay. If the patient is worrying over the goiter, operation is a small price to pay for mental comfort, and the scar is always less noticeable than the lump. Even moderate

tracheal deviation represents a certain hazard with the development of upper respiratory tract infections, and where there is definite impairment of the airway this hazard is a real one, in addition to the considerable discomfort under which these patients labor.

It is hard to know what percentage of simple enlargements will be later associated with hyperthyroidism. In my own operative experience, there have been 190 adenomas without and 131 adenomas with hyperthyroidism, which represents, roughly, a ratio of 3 to 2 in the series. All one can say from these figures is that there is a high incidence of hyperthyroidism in nodular goiters. I have already mentioned the 2% likelihood of malignancy associated with this group of cases, so that when one adds up the various points in favor of operative therapy in this type of case, it far outweighs the disadvantages of surgery. The only deaths we have had in the nontoxic group were due to pneumonia consequent upon severe tracheal obstruction necessitating emergency procedures, and a pneumococcus type III pneumonia in another patient who had auricular fibrillation and chronic valvular cardiac disease.

The individuals with adenoma of the thyroid who have developed hyperthyroidism are in general the older group of patients, and represent a high incidence of cardiac impairment. In an analysis of the results of partial thyroidectomy in this group, 44% of the unsuccessful cases presented persisting cardiac symptoms. We feel that surgery is the method of choice for this group, and employ radiotherapy only for those patients in whom the cardiac damage is so profound that operation would be almost certainly fatal. Even in the presence of congestive heart failure of considerable degree, prolonged rest will frequently improve patients so much that with an ordinary period of iodine preparation they will stand surgery; and it must not be forgotten, as Lahey and others have frequently emphasized, that these individuals have a greater cardiac reserve than an ordinary straightforward medical case of apparently equivalent severity. However, it is of great importance that operation be done before the development of cardiac damage, not only from

the standpoint of diminished risk and shortening of the period of disability, but as shown by the distinctly better results noted in the follow-up clinic in the second group of cases. A considerable degree of heart embarrassment, as shown by heart-consciousness, dyspnea, and even auricular fibrillation, may be consistent with irritation rather than actual damage. When this holds true, one would expect to find little if any enlargement of the heart, as shown by a teleroentgenogram, and but little evidence of myocardial damage, as shown by the electrocardiogram. A fair percentage of cases will reestablish sinus rhythm early in the postoperative course; in fact we have noted it, in the electrocardiogram, on the second morning after operation. If operation is delayed until actual cardiac damage has occurred, one can expect some improvement, to be sure, but a certain amount of cardiac disability is certain to be present.

We do not differentiate from the standpoint of treatment between the so-called adenoma with hyperthyroidism and exophthalmic goiter, considering that the hyperthyroidism is qualitatively the same in the 2 types of cases, and that the difference in clinical picture in typical cases is due to difference in degree of severity, and to difference in the ages of the patients. The younger group, as a general rule, presents a more fulminating hyperthyroidism; the older individuals are apt to present a higher incidence of cardiac involvement. Both groups react to the use of iodine, as evidenced by improvement in general condition, pulse rate, gain in weight on a high caloric diet, basal metabolic rate, and diminution of creatinuria when on a test diet lacking in meat protein.

In the typical exophthalmic group we feel that operation is equally the desired treatment, with the following exceptions. In children and at the age of puberty, mild hyperthyroidism will frequently be controlled by life in the country with forced feeding, rest, occasional small doses of iodine and in some cases radiotherapy. In patients around 20 years of age, with mild symptoms and only a slight enlargement of the thyroid, we frequently employ radiotherapy, and effect a satisfactory percentage of cures. In the full-blown cases,

in individuals who have had one or more bouts of hyperthyroidism in previous years, and in the vast majority of patients over 25, we feel that surgery is the method of choice. This is based on risk and the follow-up results in relation to returned economic activity and to control of symptoms. In relation to risk, it is worthy of note that the operative risk is far less than the expected mortality in the disease under medical supervision. Hyman and Kessel, at the Mt. Sinai Hospital, several years ago followed a group of 50 patients who had refused surgery. These patients received medical and psychiatric help, but in the course of 5 years showed a mortality of 14%. In all the clinics in the country where much thyroid work is being done, the operative mortality is in the neighborhood of 1%, which of course compares very favorably with the mortality just mentioned, and with other surgical procedures of similar severity. In a recent study of 188 cases, 90% of patients had returned to full economic activity by 12 months. From the standpoint of symptom control, at 6 months, 74% were satisfactory in all particulars; at 12 months 80%; at 24 months 82%; and at 36 months 89% were classed as satisfactory. The percentage at 4 years was even better, but the number of cases was too few to warrant the drawing of any conclusions. At these various periods of time, the unsatisfactory cases presented, in the main, persisting cardiac symptoms. Recurrences may be expected in perhaps 4%. The balance are usually due to the persistence of one or more of the nervous symptoms complained of prior to operation.

The use of iodine in these cases is of extreme importance and unquestionably has been the largest single factor contributing to the lowering of operative mortality. It is essential that if operation is considered iodine should not be used as a palliative measure except in real emergencies. Individuals who have received iodine for many weeks or months usually are back at the point where they started from, and one cannot hope for another pharmacologic reaction. Striking improvement is noted in those patients who have not received iodine previously, and they may be operated on with every expectation of suc-



cess. The patients one fears now-a-days are those who give a history of 15 or more years, having received in that time all manner of glandular extracts and iodine, and who present a cardiovascular apparatus that has suffered much wear and tear.

Another point not stressed sufficiently in text-books and articles is the question of marked exophthalmos. When the eyelids fail to close at night, corneal ulceration in the sector below the iris may occur. If following thyroidectomy there is not a prompt lessening of the width of the palpebral fissure, a plastic on the lid should be done to protect the eye and to improve the appearance. Occasionally, unilateral exophthalmos may be present, and this has been helped by section of the cervical sympathetic on that side, which results in the production of ptosis on the operated side but has no effect on the position of the eyeball.

Surgery, then, is indicated:

(1) To drain an abscess of the thyroid gland.

(2) Remove localized tuberculosis.

(3) Relieve pressure from an adenoma or Riedel's struma.

(4) In carcinoma and other malignancies.

(5) For adenoma without hyperthyroidism, to improve the appearance, to aid or prevent pressure, and to avoid development of hyperthyroidism and carcinoma.

(6) In cases with hyperthyroidism, as a method with a high percentage of cure and a low element of risk, particularly as a safeguard before cardiac damage has occurred; or, in the presence of cardiac damage to effect improvement in symptoms and interrupt the vicious cycle.

## OBSERVATIONS IN THE VIENNA EYE CLINICS\*

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In speaking this evening about the Viennese eye clinics, I should like first to describe, for those who have not visited Vienna, the general plan of instruction and the oppor-

tunities for attending clinics there; and, secondly, to mention some of their present day ideas and practices, particularly those that differ from our own.

The teaching, as a whole, is excellent. One may at times object to the subject matter as being too elementary or too advanced, too practical or too theoretic, but it is usually difficult to find fault with the manner in which it is presented. The chief reason for this high quality teaching is perhaps a financial one. With the exception of those holding the rank of "professor", the average of Viennese practitioners connected with large hospitals has no private work worth mentioning. The relation between his hospital hours and office hours is approximately reversed, as compared with ours, which means that he spends 8-10 hours daily in the hospital. Of this time, some is devoted to the handling of patients and a small amount may be taken up by undergraduate medical students. For this work he receives, I believe, somewhat under \$1000 a year and must, of course, pick up something additional. Therefore, he offers post-graduate instruction and, as a result of the manner in which such courses are conducted, the best teacher is most in demand and makes the most money. A popular instructor may be teaching 5, 6 or more hours daily, and by constant repetition, commencing another course as soon as he finishes an old one, he naturally becomes very proficient.

There are a great many courses given in English, and all of them, according to an agreement with the University of Vienna, are under the auspices of the American Medical Association of Vienna; an organization of English speaking medical men from various parts of the world who are in Vienna for post-graduate work. Any one, therefore, who wishes to take any of the English courses, joins the Viennese A. M. A., which occupies rooms in a building across the street from the Vienna General Hospital. There, he finds posted on bulletin boards lists of all the available English courses. These courses ordinarily cover 1 hr. of instruction daily for 6 to 25 days, and classes may be limited to a few men, or may be unlimited. They begin sometimes on a definite date, sometimes as soon

\* (Read before the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey, Newark, Feb. 9, 1931.)

as the quota is filled. The charge of \$5 or \$6 an hour is divided among the members of the class.

There are 2 or 3 disadvantages connected with these courses, namely, delay while waiting for a course to begin, occasional conflict when one finds 2 courses that he wants scheduled at the same hour, and the very elementary character of much of the work.

Besides receiving formal instruction in this way, one may also become a "hospitant". This means only that he pays a monthly fee of \$10 which entitles him to spend as much time as he chooses in the clinic, the ward, and the operating room, examining patients and observing treatments. For any one who already has an elementary knowledge of a chosen specialty this is probably the best way to proceed, for at the same time he will probably have an opportunity to take a few courses that seem particularly desirable.

Most "eye men" going to Vienna for the first time probably expect to find the pathologic work very good, but many no doubt wonder if the Viennese may not perhaps prove to be a little backward in other respects. With 2 exceptions, nothing could be farther from the truth. The average American will be shocked at their ideas concerning muscles; which include postponement of squint operations until the age of puberty, and entire disregard of the existence of a fusion faculty; also at their use of proprietary drugs without knowing or apparently caring what is in them. In general, however, they are quite up-to-date in their ideas, adopting anything new which seems desirable, whether it be American, European or Asiatic, and developing usually their own modifications and improvements.

The clinic equipment is also extremely modern and complete. One wonders how, in a country as poor as Austria, so many expensive instruments can be had for hospital use, while many institutions in this country have poorer equipment than a practitioner requires for his office work. For example, the 2 eye clinics at the general hospital have, besides a good supply of the ordinary eye instruments for clinic work and teaching, 2 Gullstrand ophthalmoscopes, 3 or 4 slit-lamps, a machine which projects ordi-

nary lantern slides, microscopic sections, and opaque objects such as drawings and charts; and a surgeon works in the operating room with the aid of 3 Zeiss hammer lamps clustered above him and has at hand a fourth which may be held by a nurse or assistant.

The teaching in ophthalmology, having been under the control of the elder Fuchs for so many years, is probably on a higher plane than that in some of the other specialties. Another good feature is that it is carried on almost entirely in the General Hospital, so that one is not compelled to take 15 or 20 minute trolley rides from one hospital to another. The eye work in the General Hospital is taken care of by 2 clinics, the first or Meller clinic and the second or Lindner clinic, each having its own examining, treatment and lecture rooms, its own wards and operating room, and also its own ideas about diagnosis and treatment, so that for all practical purposes they could be separated by a few hundred miles instead of the few hundred feet they are. Apparently, the one thing that in a way connects them is the Fuchs tradition, for almost all the men studied under him, Meller having been first assistant in his clinic for 17 years.

In accordance with the teaching of the elder Fuchs they emphasize the clinical rather than the laboratory side of ophthalmology, and their approach to a case is based always on anatomy and pathology. This tendency to get at and keep in mind the fundamental changes producing any particular clinical condition is, unfortunately, in striking contrast to our own often very superficial manner of considering our cases and is, I believe, the one feature of their work that is distinctly outstanding. Guesses are not made about the pathologic changes in eye disease. If microscopic sections of the condition have been studied, they are described; if not, one is simply told that no cases with a pathologic examination are known. One would imagine that under such conditions, considerable lack of knowledge is expressed concerning cases seen in the clinics, but this is not so. There is a very complete cross index and follow-up system in the clinics, so that a patient with an interesting eye condition can be followed for years and



if, as often occurs, he comes to the hospital to die, or his body is brought into the morgue, the eye will in all probability be examined under the microscope in comparatively short order. Only under such circumstances could anyone write the book which one of the members of the Lindner clinic is now preparing on fundus diseases, and which is to contain a history of each case, a drawing or photograph of the fundus, and one or more photographs of microscopic sections of the enucleated eye.

It is by means of this record system, too, that some remarkable fundus cases can be collected for the classes in ophthalmoscopy. A man who is giving a course in fundus disease often has postcards sent to patients he wants to exhibit and is able to show on one day optic atrophy, the next day optic neuritis, the next chorioretinitis, detached retina, congenital anomalies, or practically anything described in the average fundus atlas. Some of these patients receive their car-fare and an Austrian shilling for coming to the clinic; others nothing; and practically all of them sit patiently in the dark room for an hour while they are examined and reexamined by 10 to 15 persons.

The lectures will, in general, prove disappointing to the eye man of average experience who hopes to discover some miraculously new methods of diagnosis and treatment. They often contain very little of practical value, except to the beginner, but do touch on many subjects which can make the practice of ophthalmology more complete and interesting—such as: Why does a patient with macular disease see comparatively better at night than in the daytime? Why is a Morax-Axenfeld conjunctivitis in the angles of the conjunctiva? Why are catarrhal ulcers found in their characteristic location? Why is an iris blue, or green, or brown?

It is possible, and highly desirable, for one who is going to Vienna to study ophthalmology, to avoid some of the inconveniences of the short courses by taking the so-called Fuchs' course. This is a rather concentrated series of lectures, practical clinical hours and laboratory periods which has been given during 8 to 10 weeks in the Fall for the past 7

years. It is intended for men who have had previous experience, such as an eye internship or other elementary training, and is under the direction of the younger Fuchs who makes a sincere and rather successful effort to have each subject taught by the best teachers available.

I want now to mention more specifically, though I am afraid it will be rather disconnectedly, some of the ideas and methods in vogue at present in the large Vienna clinics and in the clinic of Elschnig, at Prague, who is, by many competent observers, considered the outstanding man on the continent.

There is nearly always considerable difference of opinion anywhere concerning operative methods, and it is especially significant to find certain procedures followed routinely in 3 independent clinics, as they are in regard to cataract extraction. In each of these clinics the cataract operation is performed with round pupil, with a fixation suture in the superior rectus tendon, and with akinesis of the lids by novocain injection. In regard to other features of the operation there is less uniformity. Both Elschnig and Lindner do the intracapsular operation routinely, dilating the pupil before operation, suturing a rather large conjunctival flap, and instilling eserin after the operation. Lindner excises a small piece of iris peripherally after extraction of the lens, and Elschnig simply makes a small peripheral iridotomy with a sharp-pointed DeWecker scissors immediately after the incision, without removing any iris or touching it with forceps.

In the Meller clinic the capsulotomy operation, with peripheral iridectomy and small conjunctival flap without sutures, is routine, the intracapsular operation being reserved for immature and hypermature cataracts. Meller lays stress on the importance of opening the lens capsule with capsule forceps rather than with the cystotome, in order to remove as much of the anterior capsule as possible, thus preventing, partly, the inclusion of cortical matter between the 2 layers of capsule and the formation of a secondary cataract. He also calls attention to the delayed healing which follows inclusion of a small tag of lens capsule, often invisible in the wound, and feels

that preservation of the round pupil tends to prevent this complication. It is interesting, however, that after discussing this and other advantages of the round pupil, he concludes by saying that in very old people and in one-eyed patients a complete iridectomy should be done. Preliminary iridectomy is done only in those cases where a swollen, cataractous lens is producing some secondary glaucoma; never preparatory to extraction of an uncomplicated cataract.

In the operative treatment of glaucoma it is the general practice to perform an iridectomy in acute cases. In chronic cases Meller uses the trephine, Lindner the iridencleisis, and Elschmig the cyclodialysis. Meller states that cyclodialysis is the best operation for glaucoma in the aphakic eye. In the Vienna clinics, attention is called to the frequency of late infection, i.e., 1 year or more after operation, in eyes which have had an Elliot trephining; Meller stating that in his cases it has been 7%. In the Lindner clinic late infections occurred in 16 cases out of a series of 342.

A bacteriologic examination of the conjunctival sac before operation is not done in the clinics of the Vienna General Hospital. Lindner gives 2 reasons why they have stopped this procedure; that there are always bacteria in the conjunctival sac, and that simple examination of a smear from the conjunctiva is insufficient for certainly detecting organisms there. His investigations have convinced him that most bacteria in the conjunctiva enter into the cells and are, as he says, "epithelial parasites". He believes very strongly in the efficacy of 1% silver nitrate, according to the method of Bell, of New York, which, he says, brings about coagulation of the superficial conjunctival cells. These cells, containing most of the bacteria present in the conjunctiva, are then washed out by the routine irrigation upon the table at the time of operation.

Considerable work is being done with the Gonin cautery operation for retinal detachment. This has been developed intensively in the Lindner clinic, where a rather elaborate method of finding and localizing the retinal

tear is in use. The patient sits with his eye in the center of a large, heavy brass ring, graduated in degrees, to which is attached a semicircular arc with its convex side toward the observer. This arc rotates about the visual axis of the patient's eye, and carries an electric ophthalmoscope of the tubular sort. By rotating the arc, and sliding the ophthalmoscope along it, the observer examines systematically the entire fundus, and indicates on a chart the position of any holes or tears found. The horizontal meridian of the eye is then marked by 2 dots of india ink, placed nasally and temporally, just outside the limbus. At the time of operation, a metal indicator, consisting of a ring concentric with the limbus, is sutured in place over the cornea. This ring carries one or more limbs which extend out radially, following the curve of the sclera backward, and previous to operation they are adjusted and trimmed off so that the tip of each lies over a retinal tear. These positions are then marked by touching the sclera with the cautery tip, the indicator is removed, and the operation performed. By this method, Guist, in the Lindner clinic, has found retinal tears in 95% of the cases examined, and of those in which a tear is present, has found 2 or more tears in 90%.

Very recently, because of the diffuse destruction of chorioidal and retinal tissues by the thermocautery, they have substituted cauterization of the chorioid by fused potassium hydroxide, after exposing the area by a scleral trephine.

Nonsurgical treatment of eye conditions in the Vienna clinics is very much the same as here.

In regard to diagnosis, their ideas are somewhat different from ours, and their methods of examination occasionally better because they are more thorough and exact. Keratitis, iritis, chorioiditis, etc., that we frequently consider the result of some hidden focus of infection, are called tuberculous, and although the existence of such a thing as focal infection is admitted, its importance is not considered very great.

At this point, it might be well to mention the views of Prof. Hirsch, the rhinologist, concerning the relation of sinus disease to



optic neuritis. He states that only 8 to 10% of cases of retrobulbar neuritis arise from sinus infection, and calls attention to the fact that a suppurative inflammation is not essential to optic nerve involvement; a catarrhal inflammation with the resulting osteoporosis being quite sufficient.

In ophthalmoscopy, red-free light is frequently used for studying cases of retinitis and neuritis. The younger Fuchs says that in his practice, ophthalmoscopy with red-free light is almost of as much importance as examination with the slit-lamp.

Patients refracted under a cycloplegic are examined by the method of cylinder skiascopy elaborated by Prof. Lindner. This is an extremely accurate objective method which depends essentially on the fact that when 2 cylinders are crossed at an oblique axis there is formed a spherocylinder combination with its axis lying somewhere between the axes of the crossed cylinders. It will be seen that if the astigmatic eye is considered a cylindrical lens which we are attempting to neutralize by another cylinder of opposite sign placed in the same axis, some rather odd retinoscopic shadow will be observed when the neutralizing cylinder is placed before the examined eye at an incorrect axis. Lindner has systematized these skiascopic pictures and has put forth some practical working rules, so that this method is now used routinely both in his own and in the Meller clinic.

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## LEUKORRHEA, ITS SIGNIFICANCE AND TREATMENT

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In considering the symptomatology of morbid conditions of the reproductive organs of women, I have always found it a convenience, as well as a special advantage, to divide the subject into: (1) symptoms arising in the body at large, or what one might denominate systemic or general symptoms; and (2) those having their source in the genital organs themselves, which I customarily refer to as pelvic or local symptoms. While the first group

must be looked upon as of very definite clinical importance, the latter are infinitely more significant, not only from the standpoint of diagnosis but more especially from the aspect of etiology.

I have always felt that the association of numbers aided the student in not only grasping but retaining certain fundamentals of the subject, and I have pointed out that numerically in the second group, there are 5 outstanding symptomatic expressions of both physiologic and pathologic processes. One or all five symptoms may be present. In the order of frequency they may comprehensively be enumerated as: (1) Leukorrhea; (2) altered menstruation; (3) bleeding; (4) pelvic discomfort, at times expressing itself in actual pain; (5) and finally, irritability or dysfunction of the adjacent organs, namely, the bladder and bowel.

In order of frequency, leukorrhea occupies the foremost place. It is present in all pathologic conditions involving the genital organs. It is not only the most frequent, but the most significant local symptom as well. Generally speaking, it is the first symptom to appear and the last to cease. Before discussing, however, this clinical manifestation of pelvic disease in detail, it seems incumbent that some utterance should be made with reference to the so-called natural secretions. I am led to adopt this plan because, first, there seems to be some misunderstanding regarding this feature of genital physiology and, secondly, because without an intelligent conception of the normal secretions it is obviously impossible for one properly to comprehend and interpret the abnormal.

*The vaginal secretion.* Since there are no glands in the vaginal mucous membrane, the small quantity of fluid present must be generated partially by the squamous epithelial cells lining the canal and partially by osmotic processes. Physically, the vaginal secretion is bluish white and resembles both in color and consistence ordinary skimmed milk. Generally, on separating the labia, it is found only in small quantities. Usually there are observed only a few droplets escaping from the vaginal orifice.

Chemically, the material is highly acid in re-

action. This has long been ascribed to the presence of the vaginal bacillus of Döderlein, but, since the acidity pursues a more or less cyclical course, it has been suggested that the reaction may in some way be governed by endocrine activity. At any rate it is assumed, and quite properly too, that the special chemical character of the secretion is an exceedingly important factor in nature's defensive mechanism.

*The cervical secretion.* The secretion elaborated by the cervical mucous membrane is frequently compared to the white of an egg. This is entirely erroneous, because it is wholly devoid of color. Strictly speaking, it is as colorless as the purest crystal and only assumes a whitish hue when coming in contact with the acid secretion of the vagina.

In pregnancy, as a result of this chemical combination, a thick, white, tenacious mucoid plug, the operculum, forms in the cervix, blocking the external os and forming, thereby, another factor of noteworthy importance in the barrier of defense. It is the operculum—stippled or stained with blood—discharged with the onset of uterine contractions that constitutes the *show*, the first positive sign heralding the advent of labor.

*The uterine secretion.* The secretion elaborated by the endometrium is of small importance clinically, nor is it of special moment diagnostically. It is physically somewhat like water in color and consistence, and chemically it is alkaline in reaction. It becomes of some importance when excessive, as for example, in that rather curious condition known as *hyorrhea gravidarum*.

With this rather sketchy introduction, I shall now try to answer a question that I am quite confident occupies the minds of the majority of the members of this assembly, namely, my object for selecting a topic for discussion so elementary as leukorrhea. There are several reasons why I elected to discuss the subject.

(1) I believe that one should always endeavor to consider a theme of practical value.

(2) I am quite convinced the best interests of all are served not by presenting a topic of ultrascientific proportions, but one commonly met with in every day clinical

work. I have found that most of our scientific meetings are attended largely by men in general practice and it is to these, provided one has a message, that the message should be conveyed.

(3) I was persuaded to speak of leukorrhea because one must recollect that it is fundamentally a symptom; not a disease, but an expression of disease. It, hence, becomes obvious that the cause of the symptom, rather than the symptom itself, must be determined and treated.

(4) It is prudent to recall that leukorrhea may have a simple etiology and respond to a simple therapeutic plan. On the other hand, its cause may be more or less obscure, not susceptible to recognition by ordinary means of examination, but only after painstaking microscopic scrutiny.

(5) It is important at this time to emphasize that one of the most frequent causes of leukorrhea has heretofore only occasionally been recognized.

(6) I further elected to consider the topic because the condition is treated, as a rule, in a most unscientific and perfunctory manner.

(7) It is now quite generally conceded that many cases have been treated hitherto on the assumption that they had their source in gonorrheal infection. Patients of all ages, from infancy to senility, may be found in this category.

(8) Because of the prevailing, if not pernicious, habit of regarding most cases of endocervical origin, and treating them as such.

(9) Because a most frequent form, if not the most frequent form of all, though first described 95 years ago, has been until quite recently grossly overlooked. In our Antenatal Clinic we find this type of disease more frequent than venereal infection.

(10) Finally, because to the cervix, in many cases, destructive cauterization has perniciously been performed, with the infection resident in the vagina and not in the structure cauterized.

It might be of interest at this time to say that historically one finds reference to leukorrhea in the oldest medical literature extant; recently I had occasion to peruse abstracts from Eber's Papyrus, written some 1500



years before Christ, and, parenthetically, you may be stirred to learn that at last this most celebrated record has been translated into English. Reference, moreover, to the symptom is found in the earliest biblical literature, literature which antedates the Egyptian document by some 35 centuries.

I have already directed attention to the fact that there is scarcely a single disorder arising in the generative organs of women without leukorrhea as a conspicuous accompaniment.

Considering the symptom from its purely pathologic aspect, one finds that its clinical character may be almost as variable as its causation. For example, in simple vaginitis the discharge is usually of a thin, watery, catarrhal or suppurative type. In venereal infection it is found as a thick, irritating, sticky, pyogenic discharge. In malignancy, involving either the vagina or the cervix, it appears as a serosanguineous, malodorous, burned-beef-juice material.

In a form now recognized as exceedingly common, it manifests itself as a free, copious, thick, yellowish, offensive, irritating, bubbly or foamy discharge, and it is this variety that I have chosen to talk about tonight. It was first described by Donn , in 1836. The symptom may be experienced in individuals of all ages and it has been transmitted from woman to man. This type of leukorrhea is associated with lesions more or less typical, involving the vaginal mucous membrane, especially the membrane of the fornices and the surface of the vaginal portion of the cervix. These are found as small, punctate, hyperemic or granular areas in the anatomic situations named. Bleeding is readily excited by any form of manipulation.

It has been observed that the endocervix is singularly free from morbid alteration in this form of infection and it is almost, if not altogether, safe to say that the cervical mucous membrane is rarely, if ever, affected. This is a noteworthy feature of the trouble, so much so that one may be axiomatic and affirm that, with a discharge of the nature I have described and the cervix relatively normal, trichomoniasis may be looked upon with a fair degree of certainty as basically the provoking factor. In other words, with the dis-

charge presenting the typical features enumerated and with the cervix visually free from trouble, one is justified in making a diagnosis, provisionally at least, of trichomonas disease. Confirmation as to the cause of the symptom is readily determined on microscopic study, by finding the field, literally, flooded with parasites of unmistakable identity, namely, the *Trichomonas vaginalis*.

*Treatment.* With regard to the therapy of leukorrhea, it is apparent that no form of medication ever should be instituted without first determining its cause. Since in many instances infection of the endocervical mucosa is the source of the trouble, therapy directed to this region, especially in the form of cauterization, is almost invariably followed by amelioration. In this connection, however, I cannot too strongly emphasize the absolute futility of therapeutics of this type in *Trichomonas vaginitis*. I have already referred to the fact that the endocervix seems curiously immune to the ingress of the parasites. We, as well as many other workers, have never found the organism within the cervical canal. It can readily be perceived, therefore, that it would be wholly illogical to expect a favorable response to medication directed to this structure.

Here may I reiterate that no case of leukorrhea should ever be treated without its exciting cause first being determined. Any other course in the long run will prove unsatisfactory and may even court embarrassment. In this respect, may I crave your indulgence while I recite the clinical record of a patient who recently came under my care. She is 34 years of age and the daughter of an eminent physician. At the age of 2 years, she developed what was regarded as a gonorrheal infection of the vagina. Since that time, or for a period of 32 years, this young woman has been treated with more or less constancy, without permanent release from her most distressing symptom. Since cervical cauterization has gained a wide popularity as the accepted mode of treating leukorrhea, the patient had this type of therapy applied on 18 different occasions. During the past 2 years, 2 cauterizations were performed under anesthesia. At the present time, there is no ves-

tige of a cervix. It has been totally destroyed. The external os, or rather the mouth of what remains of the cervical canal, is on a level with or, rather, continuous with the vaginal mucous membrane.

Three months ago, she came under our observation with the clinical record cited. A local examination disclosed the typical thick, yellow, rather offensive irritating, bubbly discharge, with the typical lesions, consisting of turgescence of the labia, engorgement and hyperemia of the lower section of the vaginal mucous membrane, punctate areas of hyperemia and granulation in the upper part of the vaginal canal, especially in the fornices and surface of the cervix. A tentative diagnosis of the cause of her annoyance was made immediately and confirmation was found on microscopic examination, with literally hordes of trichomonads obscuring the microscopic field. Under treatment the patient, now for the first time in years, is not only free from the parasitic infection, but the annoying leukorrhea and the lesions have entirely disappeared.

With reference to the type of therapy instituted in cases of vaginal trichomoniasis, one may say at the outset that there is no specific recourse. It is important, however, to mention that early cases are usually responsive, while old or long standing ones prove frequently most obdurate.

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### USEFUL IRRIGATING FLUID FOR SEPTIC WOUNDS\*

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H. H. GOLDSTEIN, M.D.

Elizabeth. N. J.

For the past 3 or 4 years, in cases with septic wounds, we have been using an irrigating fluid which has been a source of great satisfaction to us in so far as clearing up the infection was concerned, and having been questioned frequently as to the method of preparing the solution, it appeared that a note on the subject would not be amiss. We have

reference not to superficial wounds, but to those deep-seated affairs which have a habit of draining foul pus for an extremely long time. It does not matter whether the sinus leads into the peritoneal cavity or whether it is extra-peritoneal. It has been used with gratifying success in ruptured appendices, tuboövarian abscesses, perinephric abscesses, and a host of other deep-seated septic conditions. The solution is never used until a definite sinus is formed. Usually, the surgeon will allow sufficient time for a sinus to form before the drains are removed. If, after the drains are removed, a sinus persists in discharging pus, then the irrigating fluid is indicated. The greatest benefits are derived in cases infected with pyogenic organisms; our experience with the Koch bacillus has not been happy.

The irrigating fluid is prepared by adding to warm saturated boric acid solution a sufficient quantity of ordinary U. S. P. tincture of iodine to give the whole an amber color. The solution must always be made up freshly, and strength of the solution will depend on the severity of the infection and location of the sinus. If the sinus reaches into a walled-off area in the peritoneal cavity, the solution should be made weak; while in a foul perinephric abscess a fairly strong solution may be used. One never adds so much iodine that a burn may result.

The best results are obtained by using a catheter for the irrigation. An ordinary two-holed, soft rubber catheter is inserted to the bottom of the sinus, and with a large 5 oz. asepto-syringe the solution is gently injected and allowed to run out along the catheter. Suction will remove whatever small quantity of solution does not run out of its own accord. The irrigation may be repeated every 2-3 hours for the first 3-4 days, and then once a day until the infection has been cleared up. The irrigating fluid serves a double purpose. It mechanically washes away the pus and debris, at the same time acting as a bacteriocidal and bacteriostatic agent. These latter properties are still further enhanced by the evolution of nascent iodine from the warm solution (iodine being volatilized at room temperature) and from the splitting of the hydriodic acid which is formed in the boric acid solution.

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\* (Read before the clinical society of the Alexian Brother's Hospital, Elizabeth, N. J., Dec. 9, 1930.)



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to The Editor, DR. HENRY O. REIK, Vermont Apartments, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, (address above), Newark, N. J.

## INTERESTING INFORMATION CONCERNING "OLD GOLDS"

In February we directed attention to the character of advertising matter used by the makers of Lucky Strike cigarettes. In April it was the "health crusade" to benefit the manufacturer of non-spit-tipped cigars, that concerned us. Now, you may be interested to learn something about the methods used—again reflecting upon the medical profession—to force the sale of Old Gold cigarettes.

You probably saw in your favorite newspaper a quarter or half page advertisement of "Old Golds", consisting largely of a picture allegedly portraying a group of physicians and nurses in a hospital operating room, capped and gowned as for a surgical procedure but suspending the professional routine while the surgeons tested the relative merits of certain brands of cigarettes. The surgeons were said to be throat specialists, who found Old Golds as kind to your throat as luckies; in point of fact, kinder. The ad also bore the imprint of Ripley, of "Believe it or not" fame.

We wrote to Mr. Ripley that *we did not*, and asked for proof that any throat specialist had participated in such a test and authorized such use of his professional character. No response has come from Mr. Ripley, but the newspaper from which our clipping was taken passed the inquiry on to the agency that had arranged for publication of that advertisement, and ultimately we were invited to inspect the records.

Accepting that invitation, we visited the agency's office in New York and had a very satisfactory conference that resulted in exposing the fraudulent character of the Old Gold statement. We discovered, in the first place, that the picture was "faked"; i.e., it was not taken in any hospital, but was staged in a studio. Next, we were shown the list of physicians' names—alleged throat specialists—appended to the advertising contract. From the list of 7 names of "throat specialists", we selected 3 (chosen because they happened to be the most legible, for investigation. One of those 3 names has not been found in any directory; one is the name of a physician who is *not a throat specialist*, and not a member of his county or state society; the third is a member of his county society and, of course, of the American Medical Association, but is *not recognized as a throat specialist*. We regret now that we did not copy the entire list of 7 names, but the relative results would probably not have been different.

So, as stated before, the advertisement seems to have been fraudulent; the picture was faked and the posing physicians were not throat specialists. We are concerned about such advertising not only because it is so flagrantly dishonest, but because we object to such exploitation of the medical profession, and we think the time has come to expose all such schemes. If American "big business" is based upon such rotten practices, it is no wonder that it is now tottering.

## Medical Ethics

### UPHOLD HONOR OF THE PROFESSION

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, N. J.

The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thralldom is to take away all liberty from one's action and thought". (Art. I, Sec. 1, Principles of Medical Ethics, A.M.A.)

There are many excellent physicians living not far from this vicinity who still think that a written code of ethics is altogether unnecessary for our profession. Strict in their own personal relations to ethics, they cannot understand why all doctors should not be gentlemen. But in the writer's very limited experience he has met with several physicians who were not gentlemen and, if they observed any golden rule, it was the rule to acquire as much gold as they could without too much nicety of observation of ethics. It is possible that readers of this article can think of instances when they themselves had like experiences. Others cannot be perfect (?) like ourselves! We have often heard speakers exclaim that if other men felt and acted as they did about the liquor question, there would be no need of a Prohibition Amendment. Perhaps they are right. Nevertheless, the writer firmly believes in a written code of ethics, and the more he scans the little booklet called "Principles of Medical Ethics", given to anyone upon request by the American Medical Association, the more he appreciates the wisdom of its authors and the actual need of its study and its general adoption.

We sometimes roll under (and over) our tongue a morsel of professional scandal. Should we not rather know that when doing this we are fouling our own nest? In other words, by avoiding doing this, we are upholding the honor and dignity of our vocation.

We sometimes would like to tell our friends and patients that our regard for old Dr. Bluff is so small that we ourselves "would not call him in to attend a sick cat" (but just why a sick feline should be singled out for this pub-

licity, the writer actually never found out). The writer is proud to tell that he once knew William Osler and can affirm (with all Dr. Osler's friends) that this great physician always had some good thing to say about others, even about his enemy (if he ever had one, which is sincerely doubted).

It seems so silly to stir up strife when by taking the opposite course one can keep all one's friends, be healthier, wealthier, more contented, and even keep one's blood pressure down around normal.

## Esthetics

### MAKE YOUR OWN MURALS

(An article by W. R. Storey, reproduced from the New York Times Magazine, Sunday, Jan. 18, 1931.)

A new form of wall ornamentation, the "photo-mural", has recently been developed. Through photography, a drawing, a printed picture or a small photograph may be enlarged to the size of a wall panel or even extended to cover the four sides of a room. Already these photo-murals have been applied to interiors of homes, cafés, clubs and offices with marked success. Professional interior decorators have achieved some of these results, but any one using the method may ornament his walls with pictures of his favorite sports, historic scenes or landscapes.

Although more expensive than most wall papers, the photographic murals are less costly than a similar decoration done by hand. They vary from about \$1 to \$2.50 a square foot, depending on the amount of detail involved, and can be hung by any paperhanger.

The individuality that may be achieved by this new form of wall decoration is shown in a dining room in the New York home of Owen Winston. Jones & Erwin, pioneers in the new murals, covered the walls with photographic panels by reproducing old prints of special significance to the owner. A scene picturing the New York postoffice about a hundred years ago serves as an overmantel decoration, while the old Gracie mansion and the original Astor residence form subjects for panels. The early-American atmosphere of the room is carried out by a fine Colonial dining table and chairs.

Following the eighteenth-century vogue of painting walls in imitation of fabrics, a dressing room in the Winston home has its walls covered with a photographic representation of drapery whose vertical folds are formally regular and decoratively flat. Two vases on pedestals—important details of a Directoire



room—have been cleverly photographed and made part of the wall covering.

More picturesque is the wall treatment of a Chicago home, in which the giant sequoia forests of California furnish the motifs. The vertical lines of the huge trees, running from floor to ceiling in soft-toned enlargements along the whole wall, impart to the room a sense of dignity, quiet and spaciousness that only a forest can convey. Tables and chairs, constructed from the same redwood in rough woodman's style, stand on the Indian rugs covering the floor.

Man's conquest of the air is depicted in full-length, black and white photo-murals in a private dining room of the Cloud Club, high in the Chrysler tower. From the first balloon ascension in Paris a century and a half ago to the latest giant plane hovering over the skyscrapers of New York, the history of aeronautics emerges graphically on the walls. The romance of oil, with views of picturesque oil fields with derricks and storage tanks, is portrayed in similar fashion in a second dining room of the club, while the making of steel, with furnaces, forges, and skyscraper construction, forms the subject in a third.

Restaurants also use the photo-mural effectively. Thus, the college inn room of the Hotel Sherman, Chicago, utilizes an original sketch by the Negro artist, Aaron Douglas. Although the sketch itself, which depicted the origin of jazz music and the modern dance, was only 12x20 in., the flat masses of the artist's design enlarged so effectively that the murals for an entire room were obtained.

Several business offices have adopted this original mode of ornamentation. A banking firm has covered 2 sides of a room with a large-scale map of the world; a concern manufacturing electric motors has ornamented its showroom with heroic-size pictures of its product, hand-colored in the actual hues; a business man who is also a huntsman has decorated the walls of his office with a panoramic picture of a hunt of the Genesee Valley Hunt Club.

Other uses for photo-murals include the decoration of screens. Old prints of famous landscapes or park scenes—an old Saratoga print, for example—are appropriately employed for this purpose. An amusing design was developed by enlarging an old-fashioned Spencerian pen sketch. Even personal experiences may be immortalized by the photo-mural process. A picture of an African big game hunt has been enlarged to adorn a screen in the office of George Eastman at Rochester.

A photo-mural may be of almost any size. While the special paper employed is generally

only 40 in. wide, sections of the picture may be printed on separate pieces and the composition joined together when the strips are hung on the wall. If, during the enlargement, the image is projected through the coarse meshes of bolting cloth, a soft fabric texture will result.

Quiet color effects are obtained by the use of gray or sepia paper, although other hues may be put on by hand. Color should be applied decoratively rather than realistically. Oils, pastels and water-colors have been found successful, but almost any painting medium workable with paper can be used for coloring the enlargement. The finished paper is sometimes coated with varnish to protect it and provide a soft, antique effect; some loss of brightness and color, however, must be allowed for when this is done.

Although sepia and black-and-white paper produce interesting and dignified results, more definite and livelier colors may be given to these wall decorations. A transparent tint composed of photo-oil color combined with turpentine may be rubbed over the enlargements after they are hung. Some satisfactory hues are burnt sienna, lemon chrome yellow, deep chrome yellow, ultramarine blue, madder lake, tolidine red and Milori blue.

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## In Lighter Vein

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### For Sobriety, Try a Monocle

She was only the optician's daughter—two glasses and she made a spectacle of herself.—Pitt Panther.

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### Tip for Travelers

For a cure for seasickness

A reader appeals.

A plan he might try is

To bolt down his meals.

—Boston Transcript.

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### Dolled Up for Sun Bathing

"Clothes do not make the man."

Observe the dandy's—

If further proof's required

Just gaze at Gandhi's.

—Boston Transcript.

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Sometimes we dally with the vagrant thought that birth control would have more to recommend it if it could be made retroactive.—Weston (Ore.) Leader.

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Archeologists have found a skeleton with the knees crossed behind the head; so the art of dressing in an upper berth probably isn't new.—Toronto Star.

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If the wife laughs at your jokes, you can be sure that either you know some good ones or you have a good wife.—Los Angeles Times.

Annual Report of the Treasurer  
1931

PERMANENT FUND

DR.	CR.
June 1, 1930—	May 31, 1931—
2 M 1st Liberty Loan 3½ % bonds..\$2000.00	2 M 1st Liberty Loan 3½ % bonds..\$2000.00
4 M 4th Liberty Loan 4¼ % bonds.. 4000.00	4 M 4th Liberty Loan 4¼ % bonds.. 4000.00
Mortgage Certificates, Investors' Title	Mortgage Certificates, Investors' Title
& Mortgage Guarantee Company.. 2700.00	& Mortgage Guarantee Company.. 2700.00
June 14—	Mortgage Certificates, Trenton Mort-
Cash from Reserve . . . . . 3000.00	gage & Title Guarantee Company.. 3000.00
\$11,700.00	\$11,700.00

GENERAL ACCOUNT

RECEIPTS	PAYMENTS
Balance, June 1, 1930 . . . . . \$17,947.52	For Publication Committee . . . . . \$14,748.30
Assessments—	" Publication Special clerical . . . . . 100.00
Atlantic . . . . . \$ 1815	" Welfare Committee . . . . . 672.38
Bergen . . . . . 2380	" Credentials Committee . . . . . 394.02
Burlington . . . . . 765	" Executive Department:
Camden . . . . . 2040	Salaries . . . . . \$14,000.00
Cape May . . . . . 375	Travel . . . . . 2,645.82
Cumberland . . . . . 750	Office . . . . . 3,641.49
Essex . . . . . 11995	
Gloucester . . . . . 480	20,287.31
Hudson . . . . . 6570	" Treasurer's Office . . . . . 65.00
Hunterdon . . . . . 390	" Secretary's Office:
Mercer . . . . . 2205	Salary . . . . . \$ 1500.00
Middlesex . . . . . 1785	Expenses . . . . . 2196.91
Monmouth . . . . . 1330	
Morris . . . . . 1245	3696.91
Ocean . . . . . 225	" Delegates to A. M. A., R. R. fares.. 187.28
Passaic . . . . . 3360	" Printing and Stationery . . . . . 1884.81
Salem . . . . . 225	" Legal Services . . . . . 988.47
Somerset . . . . . 660	" Tristate Conference . . . . . 126.62
Sussex . . . . . 315	" County Secretaries' Conference . . . 150.90
Union . . . . . 3640	" Expenses of Guests, 1930 Meeting . . 249.62
Warren . . . . . 375	" Flowers, Dr. Dickinson's Funeral.. 25.00
	" Subscription, N. J. Legislative News 25.00
43,425.00	" Refund to Dr. Hillegas . . . . . 20.00
Interest . . . . . 914.57	Reserve . . . . . 3000.00
Publication . . . . . 8,850.46	Balance, May 31, 1931 . . . . . 24,521.13
Health charts sold . . . . . 5.20	
	\$71,142.75
\$71,142.75	

RECONCILIATION WITH BUDGET

Expected Income . . . . .	\$48,450.00
Actual Income . . . . .	53,195.23
Appropriations . . . . .	48,450.00
Expenditures . . . . .	46,621.62
Operating Net Balance . . . . .	5,573.61

Respectfully submitted,  
E. J. Marsh,  
Treasurer



## Lighthouse Observations

### MANAGEMENT OF ANGINA PECTORIS

A very practical discourse on this topic was presented by A. E. Vipond, of Montreal (Amer. Med., 36:789, December 1930), from which we abstract the following:

"This name does not convey to one's mind the agonizing pain, the mental anguish, and the tragic death. How many of our personal friends and relations have suffered from this hopeless form of heart disease?

This heart trouble may develop slowly and a patient might live for many years, an attack taking place when he oversteps his limit or capacity; as long as he can keep within his capacity, both mentally and physically, he may do very well. He soon learns what he can do and how far he can walk before his heart muscle finds it difficult to contract.

The filling up of the lumen of the coronary vessels may take years to accomplish, or again, spasm or a thrombus may occlude the lumen of the vessel and sudden death may take place at an early stage of the disease.

It is a disease which is no respecter of persons. It is most frequently found among the great mental workers, and also among men and women who live a quiet life and who have no severe mental worry or strain. It is also found among housewives, clerks, policemen; people who cannot be accused of great intellectual weariness.

There comes a time with most of these patients when the slightest exertion will produce the pain. As a rule, it is a progressive disease; all depending upon the amount of occlusion of the coronary vessels.

The majority of patients who suffer from angina pectoris have *not* had syphilis. During the past 2 years I have treated 6 patients with this disease and not one of them had syphilis. In this non-luetic type of angina pectoris we do not find an inflammatory change in the coronary vessel wall, but a degenerative process; an atheromatous condition; while in the syphilitic type we have an inflammatory change in the vessel wall—a mesoarteritis; while the same changes take place in the coronary vessels.

In the majority of my cases no change in the heart condition was to be detected; as a rule the sounds were not quite so loud as in normal subject; and if an organic valve condition were present it was caused by a previous rheumatic infection.

Angina pectoris is a very common cause of death among physicians, and many eminent men in our profession have succumbed to this disease. John Hunter suffered from angina pectoris for 20 years, and after his death his coronary vessels were found to be calcified. Sir James MacKenzie, Charcot, Nothnagel and William Pepper all died from this disease.

Granted that the cause of angina pectoris is disease of the coronary vessel walls, what produces the pain and sudden death? To me, it does not appear to be a difficult problem to solve. If the lumen of the coronary artery is lessened by disease of its coats, part of the circulation to the myocardium is cut off; the result is that when the patient is sitting, he, as a rule, feels no difficulty, but as soon as an extra strain is placed upon the muscle (which is already suffering from a diminished blood supply), the left ventricle dilates suddenly and the patient suffers from this severe

pain in the chest, and down one or both arms, as well as from great mental distress. A keen observer can pick out these anginal patients as they walk along the streets. They stop suddenly and stare into a shop window and then continue their walk as soon as the agonizing pain is over.

Frederick Price states that the hypotheses which have been advanced in explanation of the attack are numerous and include the following 2 which are important: (1) That angina pectoris consists in the distention of an enfeebled ventricle. (2) That it consists in a myocardial ischemia generally due to an affection of the coronary arteries (atheroma, functional contraction, thrombosis, etc.); this ischemia being the direct cause of the pain.

I pin my faith to 2 drugs, viz., potassium iodide and to belladonna. The potassium iodide must be pushed; we must get the momentum of the drug. I give 30 gr. in a cup of water to be sipped during the daytime. I mean by this, sip a little every half hour; it can be taken in a bottle in the pocket and sipped while at work. My patients also get 8-10 minims of tincture of belladonna. The potassium acts as an alternative, and the belladonna dilates the coronary arteries and their branches. I give 60 gr. of potassium iodide with 10 minims of tincture of belladonna to my chronic cases, and this form of treatment is kept up for weeks and months with no remissions.

Amyl nitrite is not required. The patient can work if it is of a quiet character, such as office work. Avoid excitement and getting into a temper; exercise according to his capacity—he will soon find out what his capacity is.

With this form of treatment I can get results that are lasting. *None* of these patients have developed iodism.

Amyl nitrite is not required when this form of treatment is administered.

## Current Events

### TRISTATE MEDICAL CONFERENCE

The seventeenth session of the Tristate Medical Conference was held on Saturday, February 28, 1931, at the Pennsylvania Hotel, New York City, at 10 a. m., Dr. Joseph S. Lawrence, of Albany, presiding in the absence of Dr. William H. Ross, President of the New York State Medical Society, who arrived later. Those in attendance were:

New York: Drs. William H. Ross, Brentwood, Long Island; Frank Overton, New York City; and Joseph S. Lawrence, Albany.

Pennsylvania: Drs. Ross V. Patterson, Philadelphia; Walter F. Donaldson, Pittsburgh; Frank C. Hammond, Philadelphia; and Harry W. Albertson, Scranton.

New Jersey: Drs. George N. J. Sommer, Trenton; John F. Hagerty, J. B. Morrison, Newark; Spencer T. Snedecor, Hackensack; and Henry O. Reik, Atlantic City.

Dr. Reik: As Secretary, I have nothing special to report but I would like to call your attention to the absence of one of our Pennsylvania representatives who has been most faithful in attending these conferences ever since he was chosen as President-Elect of the Pennsylvania State Medical Society. Dr. Morgan is absent because of the recent death of his wife, a death which recalls the subject of our last meeting when we discussed automobile accidents. Mrs. Morgan suffered a

fractured skull from an automobile accident which occurred, I believe, last summer. I would like to put in the minutes an expression of regret at Dr. Morgan's absence, and an expression of sympathy in his recent bereavement.

This was unanimously approved.

*Dr. Lawrence* asked if there was any business to be brought up before beginning the regular program.

*Dr. Donaldson* said that he was authorized by Dr. Mayer, the President-Elect, to extend a hearty invitation to the conference to hold the next meeting in Pennsylvania, and in Pittsburgh, if it met with general approval.

*Dr. Reik*: Remembering the last time we were in Pittsburgh, I am sure we should be very glad to go back there. I move that we accept Pennsylvania's invitation to hold our next conference in that state, and leave it to the President and Secretary of the Pennsylvania Society to decide the time, place and program.

This was unanimously approved.

#### REGULAR PROGRAM

What Are State Departments of Labor Doing to Advance Industrial Surgery?

*Dr. Lawrence*: I have in mind to conduct this part of the program as a round table discussion. I have no set paper. I am going to introduce subjects and give my point of view, and would like to get yours in return. As an introduction, I shall tell you something about the organization of a Department of Labor in New York State. I presume you probably have similar organizations in your states. I know that there are some differences but whether they are material or not we can develop. Our department is headed by a Commissioner, a lady who has among her qualifications for this particular job the experience derived from chairmanship of a legislative committee that was appointed years ago to make a study of the sweat shops in New York City. Her committee, I think, started really as a local voluntary organization and after securing state authority extended beyond New York City to other large cities in the state. It is said that without question she probably knows more about factory work in this state than any other single individual because of her various personal inspections and years of experience. She is assisted by an Industrial Board of 5 members appointed by the Governor. They present no qualifications aside from the fact that they are familiar with industry and problems that the Department of Labor might take up. Of course, as a State Department of Labor she has the assistance of the Attorney General's Department when she needs it. She has also an Advisory Committee composed of 10 members, 5 of whom represent industry and 5 represent federated labor, but this group has no mandatorial powers; she need only consult them at her will and may take their advice or not as she chooses. From experience, however, I think that she relies upon them to a great extent and finds their advice very valuable. I have sat in several times at conferences, that she has called, where they considered not only subjects which you would expect them to be very familiar with, that is subjects relating directly to industry or labor, but medical problems as well. These 10 men were her advisers on matters that affected administration of the Workman's Compensation Act. Then she has several volunteer committees, on codes and rules, that she consults also at her pleasure.

There is a Deputy Commissioner in each of various other cities, like Rochester, Buffalo, and

Syracuse, in addition to the officers in New York City. And then, she is directly head of the State Insurance Fund; and the latter is growing to be, if it is not already, the most extensive carrier of insurance in the state. As a matter of fact, I believe it was said not long ago that it carries an amount almost equal to that of all the other carriers, and there is a bill in the legislature now that would make it incumbent upon communities and municipalities that carry insurance to take such insurance from the State Insurance Fund instead of from private carriers. That, if made law, would leave the private carriers only such industries as would want to go to them. This bill also provides that the State Fund may carry private insurance if requested. So, it may be only a few years until the insurance work in New York State will be carried by the state and the self-insurers. Labor is back of this movement; medical men are not. In New York City the State Fund operates very satisfactorily but up-state physicians tell us that they have more difficulty in getting settlements from the State Fund than from any other carrier.

Of course, the Commissioner of Labor controls a number of subdivisions; among which are women in industry, industrial relations, and self-insurance. She has a division of industrial hygiene, and several, 10 or more, employment agencies throughout the state. You will see, however, that she has no voice aside from the State Fund that relates to the compensation of injured workmen.

Now, this is no small matter. In 1929 there were 199,935 injuries reported. In that same year there were held in the state 523,604 hearings. They discharged about that many cases from their calendar that year. Of course, some cases go on from year to year before they are finally closed, but she has averaged 5 hearings in every 2 cases. I will leave that for our discussion to bring out—why there should be so many hearings. The administration of this Act and the paying of the authorizations allowed amount to more than \$32,000,000 in our state. When a matter so extensive as that presents itself, in which the crucial point is the medical examination and report, it does seem to us that medical men should have a more direct relationship to administration of that part of the law. Our relationship at the present time is limited to her employees. She has physicians employed to assist with the hearings. They have in the year 1929 submitted a report of the medical division which occupies just 1½ pages of this small book.

As compared with our Department of Health, the Department of Labor in its medical phase seems very poorly administered. One wonders whether it is not time that we take a greater interest and see that we get an opportunity to help contribute something to the operating of this law.

In your states, are the men who do industrial work selected in any particular way, or is it purely a matter of voluntary choice?

*Dr. Morrison*: Do you mean the Deputy Commissioners or the medical men?

*Dr. Lawrence*: The medical men.

*Dr. Patterson*: The most adequate and complete surgical and medical care is given to the employee.

*Dr. Sommer*: If he so desires, he can select his own physician.

*Dr. Morrison*: But the law does not recognize the insurance carrier. It only recognizes the employee and the employer.

*Dr. Sommer*: They sometimes employ physicians,



in our community, who are not members of the county society and if they have cases requiring hospital care from this compensation clinic they park them in a private institution. Of course, we get in our general hospitals a great many of their injury cases and whenever they can in any way get hold of them they take them away from those physicians.

*Dr. Lawrence:* Do you have a similar system in Pennsylvania?

*Dr. Donaldson:* Pennsylvania has an insurance plan of its own that is subsidized by the state, but most of the larger industries in Pennsylvania, such as the railroads and the steel and coal companies, maintain services for their own employees.

*Dr. Lawrence:* We call them self-insurers. How about the selection of medical attendants by the injured?

*Dr. Donaldson:* That is not left to the choice of the employee. It is the choice of the employer.

*Dr. Lawrence:* Does your law read that way?

*Dr. Albertson:* The law says that the employer shall provide proper medical and surgical aid for the injured.

*Dr. Lawrence:* So our 3 laws are about the same.

*Dr. Morrison:* In New Jersey the compensation is paid for by about 30 carrier insurance associations and they have found in an experience of 10-15 years that, because of allowing physicians chosen by industries to treat their cases, losses have become so enormous that they are coming to the conclusion themselves that it will be cheaper to have the physician chosen either by the employer or the employee himself than to keep on with the present system; that under the present system they are paying for long periods of disability and greater amounts for permanent disability, because of treatment by incompetent physicians.

*Dr. Lawrence:* You mean the employer in this group appoints the physician, or the insurance carrier?

*Dr. Morrison:* The insurance carrier appoints the physician.

*Dr. Lawrence:* And they are not satisfied with that and think it would be better to have the injured employee select his own physician?

*Dr. Morrison:* Yes.

*Dr. Lawrence:* The question suggested by Dr. Sommer might well be discussed at this time. He referred to the fact that patients are placed in general hospitals and moved at times without good reason. Do the hospitals charge the insurance company a particular rate for compensation cases?

*Dr. Sommer:* They charge the regular ward rate. The insurance carrier will only provide for regular ward rates. However, they will sometimes provide special nursing services and private room for an individual patient. I think that depends upon the man who insures. If he has influence enough with the company they will provide most anything. I have had one patient, who was very badly burned, for whom they provided special nursing, private room, and took care of him for more than 2 years, paying my bill also.

*Dr. Lawrence:* Does this same condition hold in Pennsylvania?

*Dr. Donaldson:* They make provision now for only 30 days' care and \$100 limit. We have hopes of increasing both of those 50%. There is much dissatisfaction all over the state about services rendered to individuals who are necessarily in the hospital longer than 30 days. There is provision made for adjustment but adjustment is required in

each individual case. That is true also in the other states.

*Dr. Morrison:* In our state the statutory provision is only \$50 for medical and surgical fees. That does not include the hospitalization. And we have a gentlemen's agreement with the carriers by which the physician will notify the carrier that his bill is to be in excess of \$50 and then the bill is submitted and if the insurance company thinks it excessive can refer it to a medical commission, which we have in each judicial district of the state. If the commission reports that the bill is fair, the company pays it without further question.

*Dr. Sommer:* I have attended a lady with a fractured hip who has been in a private room of our hospital for months. By some special arrangement they take her occasionally before the Board and give her a hearing and extend her time. Ordinarily, you would not think she should be 8 or 9 months in the hospital for a fractured hip, but they are as a general rule quite liberal. I think, too, they take into consideration many factors which we ordinarily would not consider. In this case they have just extended her time and her compensation.

*Dr. Hagerty:* Is not that provision referred to by Dr. Morrison really more than a gentlemen's agreement?

*Dr. Morrison:* No, it is simply a gentlemen's agreement.

*Dr. Reik:* I think it is written into the Act that the physician must give notice if the charge is likely to extend beyond the \$50.

*Dr. Lawrence:* I know that we are not limited by statute in this state in regard to the amount of our fees, and our limitations come from inspectors whom the carriers employ and they may interfere with the treatment or care of a patient at any time, it seems. They may take him from one physician to another or from one hospital to another. We get quite excited here about what we call "lifting cases"; this is done so extensively. Cases are lifted, I am told, from the far end of Long Island and brought to New York to be treated, or from Albany to Syracuse, with no reason to expect getting better care, so far as we can see.

Another difficulty that we have with carriers is with regard to the payment of hospitals for service. They insist upon putting patients in our wards; and our wards are all operating under a deficit. In some cases the ward rates are \$2 or \$3 a day and our hospitals up-state during the last year—several very reputable hospitals—stated that they could not operate at that rate, that it cost \$5.80 a day for their patients in the ward and when they did not get those rates it resulted in a contribution of the local charity to those insurance carriers. So, many hospitals are refusing their wards to compensation cases and are insisting on a semi-private ward for such cases, where they can charge a rate that will equal at least the cost of carrying that patient in the hospital. The insurance companies, especially the State Fund, up-state object to that method but we are gradually getting ourselves together and insisting upon it. The administration of our Public Welfare Law is aiding us on that score. The state has wards under that law and they are the people who heretofore were carried as charity patients in the hospital, and as charity patients of course they had a claim on the community, but now, under the Welfare Act, they become the wards of the state and there is no particular reason why a community chest should raise money to pay for expenses of a state ward when the state has made provision to have that

case cared for. It is our hope that we shall finally get an understanding by which compensation cases will pay their way in the hospital as though they were private cases, not of course as if they were millionaires, but as private patients able to pay.

*Dr. Sommer:* Our local hospitals are not complaining of rates. With us they seem to welcome the compensation cases. We operate our institutions, of course, much more cheaply than you do in New York State.

*Dr. Morrison:* There was some objection at first, but the insurance companies are taking care of us now all over the state.

*Dr. Sommer:* I think the carriers are dealing very fairly with us now. The medical officer in charge of the rehabilitation clinic acts as an expert and decides upon the degree of disability. However, the man does not have to accept that advice; he can obtain an outside physician and have him certify to his disability and, depending upon the standing and character of the physician he brings in, the commission takes consideration of that and he may have his time of disability extended. Moreover, they settle upon a basis of each particular injury, and if there is a residual injury there may be a question of how much permanency there will be to the injury. These cases may be re-opened within a certain time limit, for adjudication. That is at the option of the employer as well as the employee or the insurance carrier. I think our law has worked very well in the main but it has met with some opposition. For instance, an insurance carrier will enter into an agreement with the medical officer to have him care for a particular patient, and that is where we have trouble, but we hope to change that and provide for full-time officers who will no longer be allowed to do private practice.

*Dr. Lawrence:* Do you mean by the medical officer the physician in charge of the rehabilitation clinic, and who acts in the hearing, or who is appointed by the state to preside over the hearings?

*Dr. Morrison:* The referees have the power to select physicians to conduct the examinations at headquarters.

*Dr. Lawrence:* That is done in about the same way here.

*Dr. Morrison:* Dr. Lawrence referred to the great number of hearings in each case. We have had the same condition in New Jersey, and especially around the larger centers there has arisen a system of *racketeering* among the physicians and lawyers solely for the collection of fees—by persuading the commissioner or deputy commissioner to have a series of adjournments and every time they appear in court they charge from \$25 to \$50. We had to put a time limit on that. We now have an unpaid commission appointed by Colonel Blunt, the Commissioner of Labor, making a study of the compensation law and its administration in the state. We have been studying the matter for a year and are about ready to submit our report. We have a time limit during which an application for a hearing can be made and if the applicant does not appear upon the date set for him the case is to be dismissed, unless he subsequently makes another application. That would bar hundreds of cases. Then the deputy commissioners are instructed to be very careful and insist upon adequate reasons for any adjournment. If the case is set for today it must be tried today and will not be set aside merely on the request of a lawyer.

*Dr. Lawrence:* Now it seems to me—and I put it as a suggestion for discussion—that the Depart-

ment of Labor and the physician who treats the case are too remote from each other, that there should be a more direct relationship. It seems to me that one of the reasons for adjudication is that the department or the carrier is taking advantage of the lack of understanding or proper recognition of the physician who treats the patient. For instance, I have knowledge of many men in this state who rarely have any of their bills disputed. They treat a patient and, just as Dr. Sommer has said, I know men who have carried cases for an unusual length of time; the patient needed the attention, of course, and the bills were paid with no argument whatever. On the other hand, I know some men, who are just as honest and sincere as they can be, who have every bill disputed and have their office fees reduced by 25 to 50%. If they want more they have great difficulty getting it from the insurance company. The insurance company, after a bill is submitted, will frequently send back a statement that so much will be paid and send the check along, making their own reductions at the time. These physicians have no support, nobody at court to protect them, and therefore accept this reduction and the insurance companies have found the method so profitable that they continue its use.

*Dr. Morrison:* If your State Society will secure this gentlemen's agreement such as we have, and the appointment of physicians to examine doctors' accounts, that will be done away with. It has been working with us for 7 or 8 years.

*Dr. Lawrence:* I feel that if we had some intermediate positions filled by physicians that such things would not need to occur. We had some dozen or more years ago a similar situation with regard to public health. The individual physician who did public health work was not recognized and usually his work was considered wrong. Others would duplicate it, or his field was invaded without consultation, and so we developed here a very nasty feeling toward public health work. Machinery was established later which brought a direct contact between the practicing physician, the district state health officer and the commissioner, and communications went back and forth, instructions were carried along, so that at the present time the average practitioner does not feel any hesitancy whatever in taking care of communicable diseases. He knows what is necessary to satisfy the State Department and the State Department does not have any nervous feeling either with regard to the practitioner. Communicable diseases are reported, and not always is the diagnosis checked by the health officer; it is simply accepted. I believe if we had more complete machinery between the physician and the carriers their diagnoses would be accepted, their statements believed and their bills paid as they should be.

I think Dr. Morrison's statement with regard to the Advisory Board is exactly a justification of the point I am trying to bring out.

*Dr. Morrison:* We have had that Board in satisfactory operation for about 7 years. It was brought about through the State Medical Society.

*Dr. Reik:* I think we should explain that the smooth working of that law in New Jersey is largely due to the Commissioner that we had and to the machinery that was then established, for, as you have learned by the narcotic and prohibition laws, *rules and regulations* established for the enforcement of the law are more important than the law itself.

*Dr. Morrison:* I think our agreement was made by Dr. Eagleton prior to Commissioner McBride's appointment.



*Dr. Reik:* After the first Commissioner's death, Dr. McBride was made Commissioner and he further developed the work that Colonel Bryant had started, and through his service of 7 years the rules and regulations developed in the department, plus the fact that he went through the county medical societies teaching the doctors their relation to the laws, have brought about much smoother working. Also, the judicial district representatives who pass upon bills have helped smooth the way between the physicians doing the work and the employers and carriers.

*Dr. Lawrence:* How is this Advisory Board originated?

*Dr. Sommer:* One man represents the profession, one the department and one is elected through the insurance carriers.

*Dr. Lawrence:* Who selects the physician?

*Dr. Sommer:* The county society. As a matter of fact these boards do not have many cases to consider because any man who has a dispute knows whether his bill is just or not and it is seldom that a bill is brought up before that committee. Dr. Hagerty is on the Board of Essex County and he can tell us that it has not had a great deal of work to do.

*Dr. Hagerty:* I was appointed when we had no rules or regulations laid down for us. I think in justice to the carriers I might say that we had as much trouble with the doctors as with the carriers. The work was new and some doctors saw a chance to get big fees and were charging large fees for trivial work. That was one of the unpleasant features about the work. For instance, a man would have to be put in plaster and the doctor would go in every few days to see the man and it caused considerable trouble. But after our conferences our judgment in the matter was accepted and the matter was settled amicably and the work went along very well.

*Dr. Lawrence:* How was the physician appointed?

*Dr. Hagerty:* The appointment was received from the county society to which the man belonged.

*Dr. Lawrence:* There is more than one county in your district?

*Dr. Hagerty:* Yes.

*Dr. Lawrence:* How do you determine which county he shall be appointed from?

*Dr. Hagerty:* I do not know except that Essex is the largest county in our district and I think the others looked to us for that appointment.

*Dr. Lawrence:* He contributes his services?

*Dr. Hagerty:* Yes.

*Dr. Sommer:* I know in our judicial district the committee has very little work to do. I think once the profession realizes that physicians will be checked up they will be much more careful.

*Dr. Lawrence:* Do you have opportunities to increase the requests of certain physicians as well as to decrease them?

*Dr. Hagerty:* Often they failed to notify the insurance companies that a case would need longer treatment and we would take that into consideration. This provision that Dr. Morrison has mentioned was written into the act, that is, the carrier must be notified that the condition will last longer and that more money than \$50 is needed. Before that was done the Advisory Board decided whether the bill should be paid and our recommendations were accepted.

*Dr. Morrison:* There has been also another cause of complaint. The carriers' plea was that doctors did not submit satisfactory bills. For instance, a man has a burned hand and every finger has to

be dressed; the doctor sends in a bill for \$3 or \$4 for a dressing. The companies will cut that down to \$2 right away. But if he specifies that it was an extensive burn necessitating the dressing of each finger separately the bill would be paid.

*Dr. Sommer:* You do not want to render a lump sum bill to insurance carriers, for they will complain about that. But, if you itemize, and send even a larger bill, it will be paid; that is an interesting fact.

*Dr. Reik:* The principal complaints at the present time are: first, a failure to notify the insurance company that the bill will amount to more than \$50; and secondly, the failure or refusal to render an itemized bill. Those are the 2 main complaints.

*Dr. Lawrence:* The next point I want to bring out is that in our state the Department of Labor limits its interest almost entirely to disputing the amount of compensation. So far as I am informed, our Department of Labor is limited in its constructive work with regard to injuries and occupational diseases to the issuance of a small journal, 4 pages once a month. Usually, half of that is taken up by description of a particular type of machinery in some factory, or some scheme of ventilation, and it only goes to a limited number of people in the state, usually, I believe, to physicians who are employed by self-insurers or workers in the Department of Labor. No effort is made by the Department to bring the physician to a better understanding of industrial injuries and occupational diseases, the value of which was so beautifully demonstrated in the Army. Every man went to war, I think, feeling that he would be as good a doctor as the next fellow, that he could treat a gun-shot wound, or this or that, but he was not there long before he found there was a lot he had to learn. And those men coming back have added more to the constructive study of injuries and to the advancement of the care of injured workmen in our state than was learned during all the years that the department itself has been in existence.

*Dr. Morrison:* One of the reasons why your department's chief function seems to be to limit the amount of money paid for compensation of injury is the fact that you have a State Fund. If your insurance was all carried by business concerns you would not have so much of that trouble.

*Dr. Lawrence:* In any of your departments, is there any constructive interest being taken in the injured men?

*Dr. Morrison:* Yes, the basis of the law in New Jersey is the interest of the employee.

*Dr. Lawrence:* The thing I have in mind is this: Take the common head injury. Does the Department of Labor make any effort to get at the physicians who are doing industrial work and to keep them abreast of the times concerning the treatment of head injuries?

*Dr. Morrison:* No.

*Dr. Lawrence:* Last year we made it a special point at our branch society meetings to discuss head injuries, and it was one of the most interesting subjects that we had at our conferences.

*Dr. Morrison:* That is one of the duties of our state societies. They must explain that industrial surgery is a branch of general surgery, that it is almost another specialty, and the ordinary family physician is not always prepared to take care of these cases. We must recognize the men who are making this a special line of work.

*Dr. Lawrence:* I will agree with you in part but we did not solve our public health problem in that

way. The public health department made it a point to see that the doctors were getting an opportunity to know the differential diagnosis of chicken-pox and small-pox, of measles and scarlet fever and other things. They instituted regular methods of instruction, giving the physicians an opportunity to get that information if they wanted it. I think the Department of Labor has a similar obligation to the physicians who are willing to take care of injured workmen.

*Dr. Reik:* Don't you think a large percentage of the profession would resent instructions of that kind coming from a lay organization?

*Dr. Lawrence:* Yes. It should have a medical advisory division that would take care of the medical work.

*Dr. Morrison:* Why doesn't the state society recognize industrial surgery and teach its members?

*Dr. Lawrence:* Even that would be limited in its extent.

*Dr. Morrison:* But it at least would be accepted by the physicians without resentment.

*Dr. Hagerty:* The profession would come to recognize that. In St. Michael's Hospital, with which I am connected, every case of head injury is referred to the head department with consulting head-surgeons. When it is found that the patient has not a fractured skull he is sent back to the general surgeon but all cases of head injury are referred to the department of head-surgery until it is determined that there is no head injury.

*Dr. Lawrence:* Of course, the problem is not limited any more to surgery. There are the occupational diseases. In New York State there are many diseases and conditions as difficult to diagnose as the communicable diseases. There are the different types of poisoning, and then there are abrasions, the asthmas, and various pulmonary troubles. I may be wrong but I do think that the Department of Labor should be in a position to assist the medical societies in helping a man to get instruction up to the minute on conditions that are to be treated. We raised this question in a group here in New York City one day in regard to handling just a broken bone. It was demonstrated that appliances could be created that would be very effective in holding bones in place and some very elaborate machinery was devised. There are certain types of industrial injuries, or certain groups of injuries, broken bones, for instance, that occur more frequently than others and certain physicians who see many of those cases have devised improvement in the manner of handling them. The compensation people are acquainted with that and they get the notion of what such an injury ought to be allowed in compensation. Well, a man up in the woods who has a similar injury does not have the advantage of this man's experience down here and he treats it in his own way. The result may be that it takes him twice as long, and then, maybe, it is not as satisfactory.

*Dr. Albertson:* I know that it is not correct. I know, personally, that we have in our district many men who treat fractures and they may take longer to rehabilitate their patients than the men in the cities take. The way the army has brought out the method of treating fractures is mostly a myth. I will admit, frankly, that there are some improvements but I happen to come from a community that has both the metropolitan and an urban condition, and I happen to see patients with both classes of men, and it is often surprising to me—the result which a doctor will get in a country farm house where he has few or no modern

appliances but treats the fracture in the way he was taught to do years ago. I am thinking particularly of fracture of the femur. I have seen many of them treated in a farm house with wonderful results, and without the use of an x-ray apparatus. I am not advocating this as the best thing to do, but I am bringing out the point that it is done with good results.

*Dr. Lawrence:* I grant the exception. I was speaking of the principle.

*Dr. Albertson:* The matter of time for rehabilitating a fracture or a head injury, particularly in compensation work, is based largely on the reputation of the physician. If he is anxious to do good work the company will usually take the right attitude toward that man. If they find another man who is dragging his cases along they soon know that and adjust his bills accordingly.

*Dr. Lawrence:* But a man who has had experience is pretty likely to have advantages in the treatment of industrial injuries over the man who has but little experience, and would it not be wise to have the experience gathered by those men who have many cases transmitted in some way to the other men?

*Dr. Albertson:* Generally speaking that is true but there is a great deal of superspecialism today. We are specializing in everything. There is advance being made in medicine and surgery and particularly along the line of industrial surgery all the time. There is a chance for everybody to learn. But I am satisfied that most of those things should be thoroughly tried out and proved before they are given out to the general practitioner as adopted facts. I believe, and I think the industrial surgeon will bear me out, that there are too many men who have gotten an idea that certain forms of plaster splint, for instance, are adaptable to all kinds of fractures and very many serious results will be shown in the hands of men who do not know how to use plaster.

*Dr. Reik:* I think we have looked upon the point that you make regarding education of the profession as an obligation of the profession to itself, and we are covering that, in part at any rate, by arrangement of our programs at the state and county medical society meetings. In the annual state society meeting, for the past 2 years, 1 session has been devoted especially to industrial medicine. For instance, at the last meeting there were 2 sets of papers, one that started with injuries of the eye and special organs, and the other dealing with fractures in general, skull and long bones. We invited selected men to prepare those papers, and invited in to discuss them experienced physicians and also representatives of the Labor Department and of the insurance carriers. Those discussions practically amount to a carefully prepared dissertation on the whole subject of industrial medicine. I happen to remember it because we have been publishing the proceedings in the December and January Journals. At times we have touched upon occupational diseases, and the April Journal covers the question of lead poisoning, including 1 paper from a man who has devoted his attention largely to medicolegal affairs and he tells us the legal aspect of occupational diseases. We have assumed that education of the profession in regard to this matter belongs to us rather than to the Labor Department, but I see no objection to having the said department aid in the matter and I think it should be glad to do so.

*Dr. Lawrence:* Did you not have the same feeling at one time regarding Public Health?

*Dr. Reik:* I think I have it yet.



*Dr. Lawrence:* In Pennsylvania they rely a good deal on their Secretary of the Public Health Department for instruction and assistance in developing public health work, do they not?

*Dr. Albertson:* Oh, yes indeed.

*Dr. Lawrence:* Your public health work in New Jersey is largely under a lay department, is it not?

*Dr. Reik:* At the present time the Commissioner is a layman.

*Dr. Sommer:* Ours is an industrial city, of course, and we have industries in which poisonings were common at one time. Now they are comparatively rare. In the pottery industry we have practically no lead poisoning occurring. The methods of manufacture have changed so much, there is less hand labor, and more casting and machine labor. The American steel and wire mills have not for years had such a thing as lead poisoning. Until recently a case would occasionally occur. In the process of heating the wire there is a vaporization of steam and the workers would inhale the steam and get lead poisoning. Now, the only types of lead poisoning we see are due to carelessness of some individual who takes up painting as a side line or in the home. So far as the industries are concerned, these cases have practically disappeared.

*Dr. Morrison:* There has been called to the attention of our Commission the fact that there are at present pending in New Jersey suits for lead poisoning amounting to \$9,000,000. All of these are in the hands of racketeering groups of physicians and lawyers, and the injured claiming compensation are negroes or Portuguese. It has become so extensive that the men engaged in such industries in New Jersey pay \$900 a year per employee in insurance to protect themselves.

*Dr. Sommer:* I can only speak for local conditions. It has practically disappeared in my district.

*Dr. Morrison:* Speaking of instructions, in addition to what Dr. Reik said about the program of our state society, we have 2 groups of Post-Graduate Lectures offered to the county societies, that are given by men connected with hospitals and colleges in Pennsylvania and New York. Besides the elective courses in medicine we have one in minor surgery, and that concerns practically all sorts of conditions that are treated under compensation. Our physicians are thus informed how to manage those cases.

*Dr. Lawrence:* How do you give that information?

*Dr. Morrison:* We are giving the information through lectures in our Post-Graduate Courses offered by the State Society.

*Dr. Lawrence:* We have in this state, of course, an Industrial Surgeon's Association but the membership is largely composed of men who are full-time surgeons in industry. There are quite a number, probably 40 or 50, at these conferences which are held twice a year and the sort of things I have been talking about are discussed there, that is, injuries or conditions that frequently arise in industries. Methods of treatment and the newer attitudes that are being developed with regard to treatment and care of such cases are brought out at these conferences. We have thought it very valuable, but the average physician did not go to the conferences.

*Dr. Reik:* I want to interrupt the meeting to introduce Dr. Snedecor, of Hackensack, New Jersey, and to offer him the privilege of the floor in order that he may take part in the discussions.

*Dr. Lawrence:* We are glad to welcome you,

Dr. Snedecor, and trust you will take part in our discussions.

My next point is on the other side of the picture. The Department of Labor people make no constructive contribution to the problem but they do sometimes encourage destructive criticism. Last year they smiled very favorably upon and helped to give expression to, if they did not definitely organize, the investigation of industrial clinics in this city and they unearthed what they considered many very deplorable conditions. They offered some legislation that would correct the conditions which they found, unsanitary offices, places where only a nurse was in attendance, and where physicians treated patients by merely looking at them, and many cases of neglect. I do not doubt that all of this was based on fact but they picked out certain places to condemn, as almost any one can do in certain neighborhoods. It seems to me that it is only fair if we listen to their criticisms of that character we ought to expect from them some constructive aid. Our Department of Labor has contact with employees and with industry, but no satisfactory approach to medicine.

I consider the next point of great value. How does the general care of those suffering from industrial injuries or occupational diseases compare with the general practice of medicine at the present time? Has not a great deal more advancement been made in the general practice of medicine in the last quarter of a century than has been made in the handling of occupational conditions?

*Dr. Albertson:* The handling of occupational diseases is comparatively young, perhaps since 1915, but I will venture to say that the advance made in handling industrial injuries in the past 15 years has been greater than in the 60 years previous. It certainly keeps abreast of the advance in general medicine.

*Dr. Morrison:* I agree with Dr. Albertson.

*Dr. Lawrence:* A very prominent surgeon has said that the general practice of medicine is 10 years ahead of the methods of caring for industrial conditions, and he is an industrial surgeon. He is an up-state man and a general surgeon but does a lot of industrial work which is referred to him. Dr. Albertson has suggested that in referred work he sees only the worst cases, which may be true. I am glad to get the reaction from your 2 states and I will balance that with the opinion of the man from up-state.

*Dr. Albertson:* It would be interesting to get the reaction from several viewpoints, say from 10 general practitioners in different localities, 10 industrial surgeons, and from general surgeons in 10 different counties.

*Dr. Lawrence:* That would be the way we should go about it. There is another phase with regard to this. I think that our treatment or care is not entirely that which the physician himself would select in many instances but when he is treating an industrial case he does about what is suggested to him or what he has found from past experience will be acceptable to the insurance companies. For instance, when ultraviolet lamps came on the market the industrial surgeon was the man very generally who bought the lamps.

*Dr. Morrison:* Plus the osteopaths and the cultists.

*Dr. Lawrence:* Yes, but among the medical men connected with the insurance carriers it seemed to be the thought that an open injury especially was bound to heal with a limited motion unless it was given a certain number of treatments with the lamp. We made an investigation and got the carriers to testify and there was just one carrier who

said there are probably some advantages to be derived from the use of the lamp. All the others said it had no advantage, and yet the lamp is still used to a great extent. Some doctors have nurses in their offices who give treatments with the lamp for \$2 or \$3 each and extend the treatments indefinitely.

*Dr. Albertson:* All of these subjects are too large to take any one's individual opinion. The thing that would be of advantage is the opinion of many men in different localities.

*Dr. Lawrence:* Another point: I do not know what the legislation in your several states is with regard to advancement of the number of compensatable conditions, but in New York State we are very likely this year to enact legislation that will remove this enumeration of conditions and simply let the law read that a person shall be compensated for *any injury or incapacitating condition arising out of occupation*. That may mean because of the apparatus or because of the work the person is doing. Now, if that is passed, there is a portion of it which says that a man who is discovered to be incapacitated from an industrial occupation which may have originated in a previous employment shall have his compensation divided between the several employers. In other words, if a man is working in a woolen or porcelain factory, and has worked during the past 25 years in 5 or 6 other factories, and comes down with pneumoconiosis, that enormous and definite disability, they will have to go back and share that compensation among the various employers if the previous employers cannot prove that he was in splendid condition when he left them, or if the present employer cannot prove also that he did have some such condition when he came to work for him. As I have pointed out to the Department of Labor, this will mean that every workman when he starts to work will have his card, and when he is leaving and seeking employment elsewhere his card will follow him, and different notations will be made of the findings. He may be examined by another physician 6 months later who will add another note. When he has reached the age of 35 or 40 no one will want to employ him. The key position for this is the physician in his medical examination. We will be the goats every time. You may not be threatened with such legislation but we are.

*Dr. Donaldson:* All labor legislation seems to originate in New York State.

*Dr. Albertson:* I am interested to know what the reaction of your State Medical Society is to that.

*Dr. Lawrence:* We are opposed to it because we know that it will encourage malingering and poor practice.

*Dr. Albertson:* Not only that, but if that goes through it will be the beginning of *state medicine*.

*Dr. Lawrence:* Certainly. This would not even exclude the office force. A man might go home and have a terrible headache. He may have been out the night before but if he develops pneumonia it will be blamed on the poor ventilation in the room.

*Dr. Patterson:* Does that mean that all the sclerotic conditions can be ascribed to occupational disease?

*Dr. Lawrence:* It depends on what the examining physician says.

*Dr. Patterson:* If a man who is engaged in laborious occupations for a number of years develops arteriosclerosis might he be said to be suffering from occupational disease or a series of occupational effects?

*Dr. Lawrence:* So far as the law reads, that is right.

*Dr. Patterson:* That is a very dangerous thing.

*Dr. Reik:* If we expect employers to compensate laborers for what happens to them while engaged, then requiring examination of laborers when they enter upon employment is inevitable. So, is it not easier for us to prepare for that than to let the Labor Department put over such a bill as Dr. Lawrence talks about now. If it comes from private interests it will surely be wrong.

*Dr. Albertson:* May I ask to what extent your carriers in New York and New Jersey require that the employees be examined before accepting a position?

*Dr. Lawrence:* So far as New York is concerned there is no general demand for that at all.

*Dr. Reik:* No, but a great many employers are doing it all the same.

*Dr. Albertson:* So many employees in Pennsylvania had old hernias which had to be fixed that now some industries will not accept a man for any position until he has a physician's statement that he has not a hernia at that time, and it must usually be some physician in whom they have sufficient confidence.

*Dr. Lawrence:* I think that is a pretty general practice among our self-insurers. They do examine their employees, and in some instances give them periodic examinations, but where the insurance is carried by the State Fund or by a carrier they do not examine them.

*Dr. Reik:* Wouldn't you want to insist upon the initial examination if you were an employer?

*Dr. Lawrence:* Yes, I would. We have for several years been following a suggestion made by the Industrial Survey Commission, appointed by the legislature, upon supporting a bill which would create a Medical Advisory Council in the Department of Labor to balance with the ones already there representing labor and industry. Last year we got it through one house and up to the final reading in the other, when the Commissioner stopped it. She promised me a conference, which she has not yet granted. The only objection she stated was that she had already allowed herself to be too liberal in taking public advice. I know, however, that she would not give this as a real reason.

*Dr. Morrison:* One of the recommendations of our commission is that a referee commission of 3 physicians be appointed, to be at the call of the commissioner, the cases to be examined by this Advisory Commission and its findings accepted as final. That will solve a great many difficulties in the conduct of these cases.

*Dr. Lawrence:* I think if we had a medical advisory committee composed of 5 physicians, 3 nominees from the State Medical Society, 1 from the State Homeopathic Society and 1 from the State Osteopathic Society, it would be helpful. They could with profit study and classify injuries and diseases arising from occupations.

*Dr. Morrison:* They will not do this unless they are paid for it.

*Dr. Lawrence:* It would be worth the money we would pay for it when we have so many men in industry liable to certain types of disease who will come up for compensation at some time or other if we pass this other measure. And the earlier we know what these things are the better. At the present time if there is a community in the state where health conditions are not good the Department of Health develops that fact. There is no longer doubt as to where you will locate with your family because of the water supply, because



that knowledge can be gotten from the state. But you can go into an industry and not know whether it is a dangerous industry or not; there is no general information of that character.

One point that industrialists have made at several of our hearings lately, which is well worth thinking about, is that they are leaving New York State with their industries and going south because we are legislating too much up here in a haphazard way. The industries are going south, some few into Pennsylvania, because those states have more liberal conditions than exist in New York.

*Dr. Donaldson:* For a number of years legislation in Pennsylvania has been controlled by the representatives of capital rather than by the representatives of labor.

*Dr. Lawrence:* Our cotton mills have almost all gone south and many other industries are leaving us. If we had this statute we would be in a position to intelligently do something.

I think this Medical Advisory Committee should supervise the preparation of pamphlets of instruction regarding treatment and care of these cases. The industrial surgeons issue monthly a publication of their own, among themselves, and I think the Department of Labor, through a Medical Advisory Board, should send to *all physicians* in the state, at regular intervals, pamphlets or a journal containing information regarding the treatment and care of industrial conditions.

Then there should be private means for supplying medical and surgical instruction for those desiring to engage in industrial work. We have our large industrial clinics in New York and you perhaps have them in other places. Why should not facilities be made available there, just as they are for general hospital work, for the man in the smaller community so that he may inform himself concerning the newer methods of handling certain types of illness or injury? And I believe that a Medical Advisory Board should take care of that. There should be facilities for the inspection of medical work in large centers by medical men. That would sort of meet what New Jersey has in its Advisory Board.

*Dr. Sommer:* When Bryant introduced the rehabilitation clinics he had an advisory board at each clinic but they did not seem to function properly, but once they got a medical man appointed to do the work there was nothing more to complain about. But, we selected the medical man originally to take charge of the work.

*Dr. Morrison:* We have those rehabilitation clinics in different parts of the state; I think there are 4 of them, and the plan is a monument to Dr. McBride.

*Dr. Sommer:* Any doctor who sends a patient to those clinics may designate the type of treatment he wants given but under the law it must be done under the Director of the Clinic.

*Dr. Lawrence:* Could the physician take the patient there and care for the treatment himself, and then take the patient back home and care for him?

*Dr. Sommer:* No! He could go there and see it done but it is done in coöperation with the Director of the Clinic who is responsible for the work of the clinic.

*Dr. Reik:* Perhaps it should be made clear that we have a double advisory system at the present time. After Dr. McBride went out of office a non-medical man came in as Commissioner of Labor and he has appointed an advisory board, of which Dr. Morrison is a member, that is separate and dis-

tinct from the district advisory boards handling disputed claims.

Your scheme of a committee of 5 medical men working in the Department of Labor to carry on the instructive work for the medical profession seems to me of doubtful value. I have always believed that if you wanted a thing well done you should do it yourself, and I think you will reach your goal much quicker if such a committee is appointed within your medical society to carry on this instructive work, because there you can assure yourself of getting the best medical advice for dissemination to the medical profession, and you can arrange it much better than any group appointed by the Department of Labor. And, you will get it promptly, instead of waiting for legislation and new appointments and starting a committee to work on something that it knows nothing about. I think you would do more effective work and reach your goal much more quickly by education of the profession through the profession.

*Dr. Morrison:* And if you do it through the Department of Labor you will be putting another spoke in the wheel of *state medicine*.

*Dr. Lawrence:* I had thought that it would be a step in the other direction. At present our greatest desire from the general group of men who are doing industrial work is for the free choice of physicians by the injured employee. Industry and labor, I have been told recently, are both opposed to this. We had thought labor was with us and that they appreciated the advantages to be derived from their own selection of physicians but apparently we were misinformed. Now, if we had a medical advisory board we believe that we would have an approach to the commissioner and an opportunity to argue the question and possibly secure our desires.

*Dr. Morrison:* Not unless the advisory board was composed of medical men.

*Dr. Lawrence:* We nominate the man. That is in the Bill. With reference to this free selection of physician, I appeared at a hearing last winter and although I was not thoroughly sold to it I put up a pretty good argument. The industrial surgeons and also the industrial carriers have had a number of conferences during the summer. One point brought out by the average opponent of the free choice of physicians is the fact that if a man is injured in the factory he cannot go to his home and have his family physician but he must select some one nearby, and he will probably pick up some one of the type of doctors who are posting notices in our factories right along, so it would be safer for the carrier to say who the physician shall be. If, on the other hand, a man has lead poisoning, why can't he have his family physician? There are, too, many other conditions which might be treated better at home. Why should he be obliged to go down town and be treated by the physician selected by the carrier? That was not brought out at the hearing but I have thought it over a great deal since then. I believe that in 3 out of 5 instances where a physician is needed the family physician would be the logical one to have.

*Dr. Alberston:* That is all true but it all goes back to the same point we spoke of some time ago.

*Dr. Morrison:* The man who pays the doctor's bill will always demand the right to choose his doctor.

*Dr. Lawrence:* That point I think needs a lot of consideration. It leads up to an enormous problem in this state. It is also an enormous problem of the Federal Government. The man who

pays the bill is not necessarily the one who handles the money. In this state, at the present time, it is the fad to have everything done by State Aid, as though the state brought money down as manna from heaven. They do not realize that state aid means increased taxation.

*Dr. Albertson:* The real argument is purely a personal one. If you were ill, who would you want to take care of you?

*Dr. Lawrence:* That is the very question I put before the hearing in the Capitol. I said: "Gentlemen, I leave it all to you. I only want to ask you if, in leaving the chamber here, you should slip and fall on a step, as one of the legislators did a few months ago, and break a leg, do you want to select your physician or do you want me to do so?"

*Dr. Morrison:* I understand that your Public Relations Committee has secured from the carriers a promise to allow the employee to select his own physician.

*Dr. Lawrence:* Yes, but those are only gentlemen's agreements.

*Dr. Morrison:* A gentlemen's agreement can carry you very far if it is lived up to. Our carriers say that they are getting worse results where the employees choose their own physicians.

*Dr. Lawrence:* Our carriers have said the same thing. It has only been tried for a few months, so we really do not know what the result will be.

*Dr. Morrison:* We are watching that with a great deal of interest.

*Dr. Albertson:* I have been interested in this subject in my limited community since compensation became a fact. Recently I talked with the manager of the compensation fund in Scranton. The State Insurance Fund has certain districts in which it works and a man is appointed to supervise each district. I said to him: "You insure groups of employees and the employer selects the physician. Other groups of people have a choice in selecting their own physicians. What is your experience in the relative length of disability in those 2 groups?" He said there was no difference. That was very interesting to me. Of course, that is only in a small community and whether that would be true in the whole state I do not know. The doctors in that particular community have dealt for many years with industrial conditions and when the compensation law came along we had the same problem to deal with that you had. They now treat these conditions in an improved manner and I do not think we have any trouble about the compensation. There is a subject I would like to take up sometime correlating with this, and that is the matter of compensation to hospitals both by the insurance carriers of compensation cases and the compensation to hospitals and physicians from accident insurance. I think it is a very timely subject for this group to discuss. You have in New York, a compulsory insurance covering automobile drivers?

*Dr. Lawrence:* It is hardly that. It is not like the Massachusetts law. If a man has an accident and cannot pay for the damages, he may lose his license and cannot get it again unless he can give assurance that in the future he will be able to pay all the damages.

*Dr. Albertson:* That means that the man who has any sense insures his car. There are more cars insured than ever before but the difficulty today is to collect your bill from those companies.

*Dr. Morrison:* In New Jersey last year we passed a law providing that against any money indemnity in accidents, except compensation cases (covers all automobile accidents), the hospital bill shall be

a prior lien. We tried to get it to include the physicians and nurses attending such patients but did not succeed.

*Dr. Lawrence:* Can the hospital include the physicians' fees?

*Dr. Morrison:* No! We hope to get the law amended later on. The year before our law went into effect the hospitals lost \$395,000 on account of such unpaid-for patients.

*Dr. Lawrence:* One of our big hospitals is seriously handicapped by caring for individuals brought into the hospital with injuries, who have received compensation themselves, and some even have cashed their checks through the hospital, but leave when their time is up without paying their bills.

*Dr. Morrison:* One of our hospitals solved that by having an attachment put on the patient's car.

*Dr. Hagerty:* May I express the hope that any education to be given the doctors doing industrial work will come through the profession itself and not through any alliance with labor. We had a very enlightening experience in Newark last year. You might get the impression from Dr. Morrison that our work had gone on very satisfactorily. It has, but Dr. McBride's office was subjected to criticism last year and the press took up the cudgels of labor. Dr. McBride, in self defense, appointed a committee and asked that his office be investigated. The investigation was started by a lawyer who was a very bitter fellow. There was a point, however, on which he was right, that some of the physicians were serving in a dual capacity, serving both the employee and the carrier. When Dr. McBride was convinced of that fact he promptly suppressed the practice.

*Dr. Morrison:* The report of our commission recommends that hereafter physicians engaged by the state be not allowed to do any other practice.

*Dr. Hagerty:* They had been doing other practice up to that time.

*Dr. Lawrence:* At one of our clinics men were being examined and referred to another clinic for treatment, and that clinic was conducted by the doctor's wife.

The meeting adjourned for luncheon.

After luncheon the discussion was continued, Dr. William H. Ross presiding.

*Dr. Ross:* I will ask Dr. Snedecor to give us some of his views on Councilor District meetings, as I know he has given some little thought to the subject.

*Dr. Snedecor:* The councilor districts in New Jersey are really just beginning to function, as I would conceive it, and we are rather looking to Pennsylvania and New York for aid and advice. As Councilor for one of the districts it is possibly appropriate to open the discussion on the development of such district branches and ask that you enlarge upon some suggestions I may make.

We see a real need for such district conferences in the growth of our medical societies, for the very vital reason that *organization* is probably the bulwark of the future for the medical profession. Upon the medical organization during the next few years there will be many stresses and strains and if we do not ramify and integrate in order to meet the problems we will regret it. Looking back over the development in our own state society, I thought of the great changes that have occurred in the last 10 years. It has been a *renaissance*. Looking to the future, I think there will be even greater changes because problems are



appearing that were never heard of before.. The reason that medical organization has even been developed to its present extent is due to the individual practitioners feeling the need for a representative organization. When that came to pass the real work in medical societies started. That need, they say, is of greater importance today. They are willing to progress further and take their part in medical organization. It is also understood that the private practitioner cannot speak out in his own behalf without losing a tremendous amount of prestige and protection which the profession has at present, but through medical organization we may reach out to meet the problems of the future. Medical organization, therefore, deserves a great deal of understanding and of scientific investigation in order to insure its proper development. In our state the Councilor District fits in between the state and county societies, just as it does in New York and Pennsylvania. We have a Councilor for each district but up to the present his duties have only been to look after local responsibilities, such as malpractice suits, and report at the State Society's Annual Meeting. The incentive for developing our district meetings was started in Trenton last November, at the meeting of County Society Secretaries and Reporters, largely through Dr. Lathrop's effort and his inducing Dr. Donaldson, of Pennsylvania, to describe his state's system. It was then left to the individual districts to decide the type and manner of association that they would form. The First District recently had a meeting in Newark at which its 4 county societies were invited to be present. Dr. Ross addressed that meeting and the discussion which followed his paper was lively enough to indicate that it was of widespread interest. There was no business transacted, however.

The Second District, of which I am Councilor, has organized along a little different line which is perhaps worth explaining. We met at Jersey City and discussed our problems, the officers only of each society being present. We looked over the various needs that a councilor district might serve, analyzed them, and decided that scientific meetings would be of very little value, if not superfluous, because we have so many of such meetings during the year. We considered the social aspects and decided that the men would have to come from too great distance and their problems were too diverse to make the meeting a success unless we had a topic in which they were all interested. We did conclude that the administrative, economic and public health phases need a district organization where we might correlate our mutual suggestions, compare them, and do some constructive work, carrying back to our county society units what we had talked over, and taking to the state society some of the problems that we felt should be met there. The third phase of possibilities is included in the topics that came up for discussion at that conference. I will give you these topics so that you may understand what is in the minds of the second district men, what they have on their program for the April meeting in Hackensack to which all our 4 county society officers are invited, and also our Delegates to the State Society. (1) Legislation to obtain liens for physicians in accident cases; (2) deciding how to regulate specialism; (3) free school examinations; (4) a definite policy to continue immunization against diphtheria, in relation to doctors, school boards and boards of health; (5) county society publicity, supervision of free medical service, and certification to county health units. These were

all live topics to the group and were assigned to members to be presented at the April meeting. It is hoped to get from that April meeting some constructive ideas to carry back to our own county societies and to carry forward to the State Society Convention. We hope in so doing to interest the Delegates with a sense of responsibility of their duties because in the past our experience has been that some were not sufficiently interested in the state society meetings even to attend them.

So, there are the 3 phases that we see in the councilor district meetings. It is entirely experimental with us at present. We are open to suggestions and we see the opportunity to develop the administrative, economic and public health possibilities in the county societies, to interest the delegates to the state society, to give them a definite program to go to the state society with in June, to rewrite our own constitution and to give the councilors some duties to perform.

*Dr. Ross:* I think this is a mighty constructive talk. I am not so sure but that the New Jersey men, with the experience of the other 2 states represented here, may quickly advance very far. If we are not careful they will certainly outdistance us. There is nothing more vital today before the profession than better organization for its public service.

*Dr. Donaldson:* I feel like continuing the discussion because I am very much interested in seeing what New Jersey will accomplish, having paid me the compliment of asking me to represent our society and go down to their society for a discussion of this subject last year. We certainly feel a glow of satisfaction when we hear the program that Dr. Snedecor has outlined and I believe it will soon accomplish as much as we have in a great many years. I was particularly interested in the suggestion that they are going to invite the county delegates to their state society to come and sit in on their discussion and actually hear about the problems before they go to their state meeting. However, I was a bit surprised when Dr. Snedecor said that they rarely attend the House of Delegates to which they have been chosen. I am sure they do not have so many interesting political discussions as we do in Pennsylvania or they would not be permitted to be absent. We have a great deal of difficulty on account of political influence in having the same men come year after year representing their county society, so that they become a little too cognizant of their power and strength, too well organized, and they are very likely to keep down a discussion of the very subjects the doctor has touched upon.

Perhaps I misunderstood you when you said you would take up all of these problems at your meeting in April.

*Dr. Snedecor:* They are to be presented briefly. We would not expect to solve all of them.

*Dr. Donaldson:* I would caution you against taking up too many of them at your first meeting. I think you would do better to give careful thought to attempting to solve 2 of them rather than to give a mere smattering of consideration to a dozen of them. I certainly am pleased to see that the thing is going and that it is in such excellent hands.

*Dr. Reik:* Dr. Donaldson might like to hear that his visit to Trenton and the inspiration he aroused by telling us what had been done in Pennsylvania has led to this development in New Jersey. I can tell him further that we have 5 councilor districts, embracing in groups the 21 county societies, and all 5 have arranged for or held such meetings since Dr. Donaldson's visit. Having left

this to each district to decide what the course of action should be, the first district, meeting in Newark, with Dr. Ross as guest speaker, discussed economic problems. Dr. Snedecor has spoken for the second district. Programs for the third and fourth are not yet announced although meetings are being arranged. Down in the fifth district they have arranged for an entire day's meeting, a combination of scientific and economic programs. The afternoon is to be devoted to a discussion of economic problems, they will then meet at dinner, and in the evening there will be a joint meeting of the Atlantic City Hospital Staff and the several county society groups at the hospital where there will be clinical demonstrations.

The start that Dr. Donaldson gave us has resulted in unanimous acceptance of the plan and an active interest in developing it.

*Dr. Ross:* In New York State no one knows more about this subject than Dr. Overton. Perhaps he will tell us something about the situation in New York State.

*Dr. Overton:* For several years one of my duties has been to attend each of the 8 District Branch Meetings. I was interested in one of the western states, I think Wisconsin, that in its constitution one of the duties of the councilor is to act as an investigator, as a peacemaker and as a censor. The peacemaker seems rather a remarkable thing.

Mr. President, I presume that what you referred to was possibly an editorial which I wrote several years ago on the ideal district branch meeting. These district branch meetings have been held since the amalgamation of our 2 state societies in 1906. There is very little said in the constitution as to what the district branches should be, so each district branch can do as it pleases. All of the district branches except the second, which includes Long Island and Brooklyn, put on a scientific program. Possibly that is not entirely wise because the business of the district branches is administrative rather than scientific, but everybody goes to the district branch meetings. There will always be from 100 to 115 present.

In the editorial referred to, I made a study one year of what I believe to be the important features of the district branch meetings and I made a composite program of these 8 meetings. In the first place there is sociability, which is stressed. Dr. Dougherty stresses the importance of sociability and I, too, think it is extremely important. There is the scientific end which is also very important although I think that New Jersey's second district is taking the proper attitude possibly regarding the scientific phase. We cannot put too much in. The third phase mentioned was reports from the different districts. The councilor was to make a review of the work. In all the state societies with which I am familiar it is the duty of the councilor to visit the county societies and find out what they are doing and to make a report on that. Some of the districts do it very, very well and when it was done well it seemed to be quite a help. But, remember that each district makes its own program and the leaders, the President and Secretary, are not always experts in the state society work and have not a wide vision, so that the program is not always carried out. Last year our President did carry it out; he made a study of what is going on in each county. If one undertakes that, particularly in New York State with its 60 counties, he will be a busy man. There is an average of 8 counties in each of our districts and to visit them all is not an easy matter. The ideal district branch meeting it would seem, judging by the way the doctors take hold and show

an interest in the program, has a three-fold interest—social, scientific and administrative—and the coordination of what each district branch is doing. The visit of the councilor to the different societies is very valuable but I must confess that the councilors do not carry this out more than 10-20% of the time.

#### REPORT OF GOVERNOR ROOSEVELT'S COMMISSION TO DEVISE A PUBLIC HEALTH PROGRAM

*Dr. Ross:* I have no formal paper to give on the the report of Governor Roosevelt's Commission on a State Public Health Program and I have attended so many meetings this month that I am getting a little cautious for fear I may get them mixed up, so, before coming here today, I put down some notes which may help me.

The science of medicine is an advancing force. There is no question about that. The relationships of medicine are steadily shifting and they will continue to do so. The changes are going on today in government, in industry, and in all social conditions. We have recently carried this gospel to more than 100 groups of doctors. The idea of organization that we hold now is based entirely on the understanding that the outstanding problems of medicine are its *public relationships*, and also on the understanding that the *science* of medicine is perfectly secure; its phenomenal advance and the momentum it has acquired during a course of years is now so secure, its cultivation is so carefully looked after by the schools, so carefully nourished in the laboratories of research and in the scientific and organized meetings, that the scientific part can rest for a time while we undertake to bring up to that level our relationships, and the organization of service for better availability of the science of medicine to the public so that the present day scientific knowledge of the prevention of disease and the conservation of life may be brought within the reach of everyone. That is really the problem we have. The problems of health are summarized in this way. We should have effective local health departments with a qualified personnel. We must have more effective service in the control of tuberculosis and cancer and venereal diseases. I attended a meeting of the Cancer Control Committee last night, and another a week ago, and although I knew something about it, the work that is starting is rather marvelous. We must have more comprehensive measures to reduce death from child-birth. It is a serious matter that there are more deaths among mothers in this country than in other civilized countries, and it is also rather appalling to find out that those who have studied it most believe that it is largely due to hurry.

We need better public health nursing. In some counties in New York State we have 1 nurse to over 500 people. We have also several other minor problems. Last year, in May, the Governor of this state created unofficial commissions to study the administration of health in the state and the adequacy of the laws relating thereto. Nothing much has been done in the way of organization since 1913 and even up to that time there was no real, definite organization. But, there have been added to the law of 1850, when conditions were vastly different, many very splendid pieces of legislation.

This Commission appointed by the Governor is made up of 14 individuals representing the widely distributed interests in the state, including every department of the state government that has any



interest in medicine. There were 8 doctors on the commission. However, only 3 were actually interested in medicine. Still, medicine has had a very much bigger voice in this than it has ever had before. Then, there were sub-committees appointed, subjects were assigned to each of the 14 members, and with the sub-committees there was a total of 86 people working on this subject all the time. A preliminary report was made to the Governor recently, a report of 50 printed pages. I have some copies with me so that all of you may have one. The preliminary report covers the ground that involves some form mainly of legislation. The final report will not be published until next spring. It will be a large volume and it is as comparable to the reports of the Child Health Conference in Washington and the Committee on the Study of the Cost of Medical Care as a state is comparable to a nation. The Governor has transmitted this report to the legislature with a message, and a Bill was introduced this last week into the Senate and the Assembly asking for the enactment into law of the recommendations.

I would like to refer to one page of it. I have told you that the membership of this Commission so far as possible covered the various interests of the state. It covered very specially the Department of Labor. In that department industrial hygiene has had less attention, perhaps, than anything else. It concerns from 2,000,000 to 4,000,000 people. Now, the outstanding feature of this report is that there is to be better organization, an organization on a county basis with county boards of health. I might say in passing that practically every scientific organization interested in public health in this state has endorsed this form of organization.

The Commission has had regard for the economic situation. It has not undertaken to impose a definite form of organization upon every county in the state but has endeavored to set up a preliminary basic organization and to permit each county to work out its problems as well as it can. Further than that, it has only insisted upon full-time personnel in counties having more than 50,000 population, and those having 30,000 it will bring under conditions of the Public Health Council. In the latter counties it does not require them to go to the expense of having full-time officers but the state will assign one of its district health officers until that county wants to take on more work. Greene County said last night it did not want to take advantage of this but wanted to have a full-time man when establishing its organization.

The major recommendation is very constructive.

First, the county provides a health officer and then the county is left to work out its own plans. In cities of more than 50,000 they should have a full-time health officer. Even New York City does not have a full-time Commissioner of Health at present. In tuberculosis problems the death rate has been cut in half. There is a law in the state requiring a sanatorium in every county, but it is not economically sound and has never been carried out; 27 counties have no facilities for treating tuberculous cases and this Bill carries with it provision for the establishment of 3 district sanatoriums in proper locations so that they will serve counties not having such facilities; they are to be built at the state's expense and maintained, and the cost charged back to the counties that use them for patients.

We have no general venereal disease control in this state, and a program is being developed for

that. At the same time, when we stop to think that New York voted a \$50,000,000 bond issue by a vote of 6 to 1, and that \$8,000,000 of that must be spent to accommodate persons who will become insane from syphilis in the next generation, it really does become a great problem.

The division of Cancer Control built up about the Institute for the Study of Malignant Diseases, in Buffalo, which has been very largely supported by the state, admitted last year 1800 people for treatment. But that does not extend over the state. Then we have maternal, infancy and state hygiene, and the Bill has something to do with all of these things.

I have spoken in 5 counties within a week, on questions arising from this report, and find a marvelous unanimity of opinion as to its constructive value. The only question is the relationship of the present health officers to the report, and the Bill carries the provision that the present local health officers shall become "deputy officers" so that they shall be continued, only having to come up to certain average standards.

Continued contact with organized medicine in New York State this year, and with its component county societies for several years, taking part now in more than 500 of those meetings, conferences and committees in the last 6 years, furnishes a basis for a conclusion that I want to now state, that the problems of medicine are not scientific, for that part is being well taken care of as we go along. The scientific end needs a minimum of attention, but *its relationships* and the *application of its science to public service* are the big problems of the future. An opportunity to observe these problems in 8 other states this year, and hearing their discussions, shows a tremendous rising tide of interest in medical relationships, and as clear an understanding that *the obligations of medicine are not entirely met just by a consideration of the cure of disease* after it has appeared. It seems plain the the public expects from the profession a solution of these problems and that social organizations, philanthropies, foundations and the state itself, are simply aids and coöperative factors and will remain so if the medical profession offers leadership in the solution of these great problems of health and sickness service. Just now we need, as never before in the history of medicine, to advance our statesmanship. Just let me say in conclusion that changing times demand a changing organization; that *idealism is needed in medicine today* just as much as it ever was. Doctors do not and cannot work without it. The majority of doctors everywhere are as great idealists today as they ever were. However, I have sometimes heard, in discussions in this state, of medical commercialism that seemed to make ideals gasp for breath. We need in medicine, no less than in all public life, a spirit that will not set private gain above common welfare or the common good. And then, when we are tired of everything else, we might remember what Osler said, that "medicine is an art not a trade, a calling, not a business, a calling in which there is exercise for the heart as well as for the head".

#### DISCUSSION

*Dr. Overton:* May I introduce a personal note, which is possibly not entirely appropriate to what Dr. Ross has said. Dr. Ross started by saying that he had not prepared a paper and then he stated that at Poughkeepsie last night he had written out a speech. I want to tell you, gentlemen, that Dr. Ross has made more than 100 speeches since he became President last June. He has written out

every one of those speeches in his office and he has gone to every meeting prepared to speak to that particular meeting with an individual talk, and he came here with an individual talk to us. You will remember that at the last meeting of this conference Dr. Ross was down for a discussion but he came with a written speech. In other words, he prepares himself and that is the secret of why he is in demand all over the state to deliver speeches. The preparation takes a much longer time than it does to deliver a speech.

Dr. Ross has brought out the points of recommendation made by the Governor's Commission which will probably be enacted into law. I want you to notice as you read these recommendations that there is no suggestion as to what the doctors are to do. Dr. Ross says that the doctors themselves practice good scientific medicine, that there is no scientific problem, that, in other words, these laws are not directed against the doctors. But, the laws specify what the municipalities shall do in every instance; there shall be a county health department and the establishment of county hospitals in New York State. Last year we passed the Welfare Law providing that there should be a County Welfare Commissioner, and that has solved some of the medical problems. It is not what the doctors shall do for the practice of medicine, it is what the public, particularly the municipalities, shall do. Now, we who have borne the heat and burden of the medical profession for these many years know that there is often no facility to help us in our work. There are in some districts no hospitals and it is difficult to work in the homes of the poor. All this law is administrative and deals with what the public shall do. In other words, if the public would do half as much as the doctors have done we would have less difficulty. Dr. Ross spoke of the *idealism* of the doctors. I don't think he meant to imply that the doctors are not already imbued with that. The most hard boiled doctors in my own county are delighted with this public welfare law and are glad to have the County Commissioner instead of the overseers of the poor, and that he shall provide medical attention for those otherwise unable to get it. A man who has several children, who works and is a good honest fellow, may be suddenly taken with pneumonia and his income cut off. Under the old system the physician would get nothing for attending that man. Under the new system, if he cannot pay for medical attention the county will pay for it under agreement with the county commissioner. Now that is the biggest advance that we have had in the economics of the practice of medicine.

Dr. Ross: I want to supplement all of this by saying that every practice adopted under this law is under the state aid. The thought came to me while talking at the little County of Greene meeting the other night that it is perfectly delightful to find that where 10 doctors are gathered together you find the same degree of intelligence as you find among 100. They worked out a plan that would double their health activities in that county at the same price that they were now paying for it, or \$13,000 a year. They had worked out a schedule that would double their activities at the same cost and the state immediately gave them a check. Greene County is next to the last county in New York that has not a hospital within its boundaries. They have gathered a fund of \$35,000, the supervisors have voted to have a county hospital and are adding something to that amount, and the state has agreed to match it. So that leaves only 1 county without a hospital.

This method of solving our problems by meeting

our obligations is bringing a remarkable response from the whole country. In this small group, I think I can tell you, and I hope you will not think that there is the slightest degree of ego about it, my personal correspondence this year numbered 1621 letters that I have dictated, every one of them on the problems of medicine, the obligations of service and the relationships that medicine must assume, all with the idea of solving the problems of medicine, putting medicine in its place of leadership. There must be a recognition that medicine and the public are partners, that the profession must furnish the leaders but that the people are the recipients.

Dr. Morrison: I think New York State is to be highly congratulated this year on the personality of its President. He has done a job that probably has never been so well done in the medical circles of New York State before and he is setting a pace for those who fill the chair in the future if they attempt to follow in his footsteps. We are always grateful to Dr. Ross when he brings his talks to this conference in the spirit in which he has done it today. The conception of this Tristate Conference was an attempt upon the part of the members and the leaders of the medical profession to break away from the old traditions of medicine and try to teach the profession in these 3 states the responsibilities that it owes to the public. It was that, I imagine, that Dr. Snedecor referred to when he said there had been a *renaissance in medicine in New Jersey*. The thought occurred to us that we must realize that doctors have a larger duty than to treat those who are critically ill and sick. The public looks to us and is beginning to demand leadership and advice in the health problems that are so rapidly coming to the front, and it is our constant endeavor in New Jersey to carry out the very policy that Dr. Ross has laid down, to carry to the county society the idea that we must broaden the scope of our activities and accept the new responsibilities that the conditions of the times are imposing upon us. The public is looking to us and expecting leadership. The social and labor groups, all those Foundations and Boards that are interested in child health and the welfare of the public, are looking to us for counsel and leadership. We shall look forward with a great deal of pleasure to an analysis of Governor Roosevelt's report when it comes to our hands next May for study. It will also give us many leads to further the work that we have already been doing.

In New Jersey we have been particularly fortunate in recent years in the progress of our Public Health Departments. We have a full-time health officer in Jersey City, Newark, East Orange, Paterson and Trenton and we have half-time officers in many smaller communities. We have tuberculosis hospitals, apart from the State Hospital, in several counties, Mercer, Atlantic, Essex. The cure of tuberculosis is going on at a fairly rapid rate and the incidence of tuberculosis is decreasing with enormous rapidity. We are very proud indeed of our record.

I am very glad that the ideas of this Conference in the last few years are leading us to promulgate more activity with a full sense of responsibility that the profession has toward the general health of the public.

Dr. Patterson: I hesitate to discuss your very excellent presentation of this very important subject. I find myself so entirely in agreement with what you have said that what I shall say is only a repetition of that already presented, and a less well thought out presentation than that which you have made.



Looking over the whole field of medicine it does seem to me that the advance of medical knowledge is reasonably satisfactory as carried on in our research institutes and by research workers. Progress is being made all the time, very gratifying progress, and medical education is reasonably satisfactory and has made wonderful progress in the past 25 years without question. It is true that those teaching institutions which did not come up to satisfactory standards have been eliminated and that those that are left are all meritorious, and it is a matter of particular gratification to know that. The future doctors of the nation, as determined by the young men being admitted to the medical schools of today, will be better than ever before. I suppose medical teaching falls somewhat short of utilizing all medical knowledge. It seems to me that medical practice probably falls considerably short of utilizing all that is taught in the medical schools and is therefore 2 jumps behind the best of our medical knowledge. It does seem to me that so far as the practice of medicine is concerned, as regards the relation of the doctor to his individual patients, conditions of practice were never more satisfactory than they are at the present time, and that is no longer a real problem. I quite agree with you that the real problem before the medical profession today is meeting the conditions of community health, and there are a large number of them, and in that endeavor we fail to a far greater degree than we did in any of our other endeavors. Now, is it not true that industry is more alert in utilizing medical knowledge for solution of its problems than the profession is in handling public health problems? Is not that a source of one of our fears of what might be called the industrialization of medicine? If the medical profession itself were as alert and as efficient in utilizing medical knowledge for the solution of these problems to which you point, venereal disease control, cancer and tuberculosis control, and the care of the indigent sick, those problems would not be so great as they are now. And, of course, it is true that if we do not take the lead in directing these activities, leaders of industry, or political leaders, or others, will take it from us and our position will be relatively less satisfactory and the profession will lose in prestige.

I feel that Dr. Ross should be commended for the most admirable work which he has done. If we had many such leaders as Dr. Ross in the medical profession the solution of our problems would advance apace. My remarks have really added nothing to this discussion but I did not want the opportunity to go by without giving Dr. Ross a special word of encouragement.

*Dr. Ross:* All of this is very helpful. I just want to tell you one interesting little thing. Recently I attended a meeting in Utica, by invitation, and I found the county society had sponsored the movement and there were present 120 delegates from 60 social organizations. I had the impression there of the power of public opinion. Those 60 organizations represented health and welfare. They represented the Parent-Teacher Associations and every organization on earth I had ever heard of, even a Bureau of Home Economics of Cornell University. I was never before so impressed with the fact that health questions are becoming public matters, and constructively so. I just recall something that the editor of the London Lancet said

not long ago: "No longer is the medical man the sole repository of medical knowledge but he must take his place in the ranks of other scientific workers." I received just that impression.

The meeting formally adjourned at 3 p. m.

Henry O. Reik, M.D.,  
Secretary.

## THE NEW JERSEY CONFERENCE ON CHILD HEALTH AND PROTECTION

Reported by Dr. Ellen C. Potter

The physicians of New Jersey have a very special interest in the outcome of the New Jersey Conference on Child Health and Protection, since on their coöperation and leadership the success of the future program depends, not only in the field of health but in that of social welfare. To an unusual degree the medical profession was called upon to formulate the program and they participated in the discussions during the sessions held on April 17 and 18 at the New Jersey College for Women at New Brunswick.

As the White House Conference, called by President Hoover in November 1930, studied the present status of health and well-being of the children of the United States and its possessions, and reported on what is being done for them and should be done; so, the people of New Jersey called by Governor Morgan F. Larson found it wise to get together in conference to sum up the entire situation of child health and welfare in this state, to measure the state's facilities and program with the standards set by the White House Conference, and to make recommendations bearing on the immediate needs and looking toward future accomplishments.

The recommendations of the White House Conference, based on a 16 months' study by 1200 experts in problems of childhood, from all sections of the United States, can be carried out only as their importance is realized and they are brought to completion by public or private agencies in the states and local communities, and, for this reason, the citizens of New Jersey came together to study their problem.

### REGISTRATION

The conference was conducted at the Governor's request by the New Jersey Conference of Social Work, of which William J. Ellis is President, in coöperation with the 4 major state departments that deal with the child: the Department of Education, Department of Health, Department of Institutions and Agencies, and the Department of Labor.

Altogether 1700 persons met, representing these state departments; county, municipal and private agencies which are in close contact with children; members of public and private social welfare agencies interested in the development of wholesome family and community life; and other socially minded citizens from all parts of the state. Delegates were present from the Parent-Teachers' Association, the State Federation of Women's Clubs, League of Women Voters, State Nurses' Association and the Public Health Nurse Association, State Medical Society, Freeholders' Association, Probation Officers' Association, State Police, fraternal, service, recreational and character-building organizations, Protestant, Catholic and Jewish societies, the American Legion, Urban League, and students from the state universities.

## THE PROGRAM

The conference was divided into 4 general sections which in turn were subdivided into smaller groups for the general discussions growing out of specific subjects presented. Dr. Ellen C. Potter was chairman of the general program.

*The Medical Service Section* had as its chairman Dr. Allen G. Ireland, Director of Physical and Health Education of the New Jersey State Department of Public Instruction. During this session Dr. Edgar A. Doll, of the Vineland Training School, spoke on "Growth and Development". Following him there was a talk on "Prenatal and Maternal Care" by Dr. S. A. Cosgrove, of the Margaret Hague Maternity Hospital, in Jersey City. Then there was a discussion of "Medical Care for Children", by Dr. Julius Levy, consultant for the Bureau of Child Hygiene in the New Jersey State Department of Health. A general discussion of these topics followed their presentation.

*The Public Health and Administration section's* chairman was Dr. Stanley H. Nichols, who is chairman of the Public Health Committee of the Monmouth County Medical Society. Public Health Organization, Communicable Disease Control, and Milk Production and Control were the general subjects which were presented in their several phases by able speakers and experienced administrators.

*The Education and Training Section*, under the chairmanship of Dr. Bruce B. Robinson, was divided into 8 groups for the discussion of special topics, as follows:

- (1) Parental Education, Mrs. William F. Little, Chairman.
- (2) Vocational Guidance, Herbert Meyer, Chairman.
- (3) Child Labor, Mrs. Isabelle M. Summers, Chairman.
- (4) Recreation, Lewis R. Barrett, Chairman.
- (5) Special Classes, Meta Anderson, Chairman.
- (6) Mental Hygiene, James S. Plant, Chairman.
- (7) Spiritual Training, Ralph Glover, Ph.D., Chairman.
- (8) Library Extension and Children's Reading, Edith Smith, Chairman.

*The Handicapped Section*, under the chairmanship of Edward R. Johnstone, met in 5 groups. The first considered the "Physically Handicapped" (the blind and partially seeing, the deaf and hard of hearing, the crippled, the children with internal conditions such as tuberculosis and heart diseases), ways of preventing such physical handicaps and the vocational adjustment of the handicapped. Joseph G. Buch, Chairman of the New Jersey Crippled Children's Commission, was chairman of this group.

The Mentally Handicapped under the group chairman, Dr. Joseph E. Raycroft, Chairman of the Board of Managers of the Trenton State Hospital, were considered from the angles of the clinics, psychiatric, social service and institutional care for the mentally disturbed, the feeble-minded and the epileptic.

Mrs. Thomas W. Streeter presided over the *Dependency and Neglect* group which considered the prevention of dependency, the administration of relief, and other phases of child dependency.

*Delinquency* and its problems was presented through consideration of the juvenile courts, probation, detention, and improvements needed in handling the delinquent children, under the chairmanship of Dr. James S. Plant, Director of the Essex County Juvenile Clinic.

*Community Organization for the Handicapped*, with emphasis on the value of county-wide services, was presided over by Mrs. Harriman N.

Simmons, President of the Council of Social Agencies, of Elizabeth.

In the 2 days, 103 speakers, each a specialist on some phase of child health or welfare, were heard at some of the 25 sectional and general meetings on April 17, and the 12 on April 18.

The program mapped out for developing the child and preparing him for his living and for his life's work, included: thorough examination of all children to discover and diagnose early any abnormalities that need curative or remedial treatment; treatment to adjust any handicaps; education, both academic and vocational, to the fullest possible extent of his abilities; recreational facilities in a community alive to its responsibilities; protective legislation; and research into all fields of child welfare to prevent and control anything detrimental to childhood; development of district and municipal public health organization and full-time trained service; and comprehensive recreational programs.

Resolutions were formulated by the committees after discussions; presented to a resolutions committee of the conference as a whole; and considered and adopted by the entire conference at the closing meeting.

## SUMMARY OF THE RESOLUTIONS

The resolutions adopted by the conference took cognizance of the ways in which our present facilities, organizations, and legislation fall short of the needs of the normal child, as well as the dependent or neglected child and the physically or mentally handicapped. They include certain standards for which the state should strive and they specifically ask for definite action on the part of governmental bodies for the health, education and protection of the children, for legislation whenever it is necessary to bring the desired results, for complete surveys where only general facts or conditions make impossible a real picture of the problem.

A Continuation Committee on Child Health and Protection, as a committee of the New Jersey Conference of Social Work, was constituted by the conference to carry into effect the recommendations that the childhood and youth of New Jersey might receive the maximum benefits. A number of physicians are members of this Continuation Committee.

The specific recommendations that require response from a definite group include that the State Board of Education shall:

- (1) Appoint an advisory council to study ways of making specialized education available to local districts and to give adequate opportunities to the gifted child.
- (2) Establish classes in parent education for intelligent and inquiring parents.
- (3) Set up minimum standards as to the number, qualifications and training of school attendance officers: (a) Governor be requested to appoint a committee to study the efficiency of local health administration in small districts for the purpose of suggesting legislation. (b) Health officers be full-time workers. (c) The various state and local departments engaged in the work of child care and protection be reviewed for further advancement of their activities. (d) Additional legislation be enacted for the protection of children in industry and for the migratory child. (e) Civil Service Commission keep its standards high for all social workers who deal with children. (f) A research council be formed to promote co-operation in child research.

General recommendations suggest that: (a) ade-



quate public or private child caring agencies be established in the state for the protection and care of children, thus providing case work facilities to prevent delinquency and dependency and subsequent commitment of children to the care of the state; (b) desertion and nonsupport laws be more strictly enforced; (c) money earned by prisoners be applied to the relief of their families and that employment of prisoners be increased when feasible; (d) the state and local systems of mental and tuberculosis clinics be further enlarged, and psychopathic wards in general hospitals be further developed; (e) the principles of mental hygiene be taught in the colleges, medical, law, and divinity schools, police training schools and the like; (f) health education be emphasized in the secondary schools and colleges that adults may be prepared to guard child health; (g) facilities for treating contagious diseases be increased; (h) funds be made available for developing a research program into the causes, prevention, treatment and education of the physically handicapped child; (i) state cooperate with the county administration of probation and a state-wide program for the extension of probation be developed.

*Recommendations* were also made that there be set up in the Department of Education a central bureau of pupil personnel guidance; that school boards and municipalities provide adequate play space and facilities for all age groups; that public libraries, municipal and county, and school libraries be adequately supported and promoted and that the use of libraries by children be encouraged.

#### CHILDREN'S BILL OF RIGHTS

A "bill of rights" was adopted enumerating the rights to which all the children of the state are entitled whether they live in the city or in the country, in the remote sections or in the centers of population, whether they be rich or poor, physically and mentally able or handicapped.

The conference agreed that all children of New Jersey had:

*A Right to Happiness*, as represented by the spiritual and moral training and sympathetic atmosphere of a home financially secure in a community affording adequate recreational facilities.

*A Right to Health*, as represented by prenatal and postnatal care, nourishing food, sanitary living conditions in school, home and community and health education and protection.

*A Right to Growth*, physical, mental education, personal, and recreational from an unhampered childhood throughout youth to adult life.

#### RESULTS

The uniting of all the forces in the state working for the betterment of conditions relating to children is perhaps the most important outgrowth of the conference. Through this renewed cooperation, the child himself will be considered by the groups in the future, and programs will not emphasize one phase of his development as separate from the others.

The practical results will be manifest during the next few years as the recommendations of the conference are carried out through the cooperative effort of existing state and local organizations.

The Continuation Committee will further the program of child health and protection and will give publicity to the needs of all children so that there may be developed the will on the part of the people of the state to provide for their needs in

the unshakable faith that the childhood of the state is its most precious possession, an asset in whose interest every sacrifice is supremely worthwhile.

#### AMERICAN COLLEGE OF PHYSICIANS

(Proceedings reported by Dr. W. Blair Stewart, of Atlantic City.)

The Fifteenth Annual Session of the American College of Physicians was held in Baltimore, Maryland, March 23-27. General Headquarters, Sessions and Exhibits were located in The Alcazar. Dr. Maurice C. Pincoffs, Baltimore, was Chairman of Committee of Arrangements, ably assisted by Dr. Sydney R. Miller, President of the College, and an efficient corps of assistants. Clinics and demonstrations were given every afternoon in the various hospitals of Baltimore. Every subject of Internal Medicine was ably covered. The general sessions were held morning and evening and were devoted to a most instructive series of symposiums on Gastro-Intestinal Disease, Heart Disease, Public Health, Medical Practice, Medical Economics, Endocrine Disorders, Anemia, and general subjects.

The latest research work on all these branches was presented in such an interesting and instructive form that the whole meeting was converted into one of the best post-graduate courses on Internal Medicine ever staged. It will be impossible to review even the high spots in this report. All papers will be published in the coming monthly issues of *Annals of Internal Medicine*, the Official Journal of The American College of Physicians. Without doubt the outstanding address was the classic talk by the Dean of American Medicine, Dr. William H. Welch, who spoke on "research and historic medicine".

The various reports show a healthy growth of the College in science and research, as well as an increment of a large number of America's best internists. There are 8 Masters of the College; 2297 active Fellows and 533 Associates—a total membership of 2888. Of this number, 366 were elected at this session. The Treasurer's report showed a net balance of \$23,214 for 1930 which, added to the Endowments and general fund, amounted to \$88,338—a very healthy financial condition for such a young organization. The official *Annals* was published with a surplus of \$561 at the close of its year, March 1931.

Aside from routine business at the annual meeting, the following resolution was enthusiastically adopted, only 1 vote being cast in the negative.

#### TEXT OF RESOLUTION

"The enactment of laws by the United States Congress and many State Legislatures has deprived the medical profession of its inherent and deputed rights to prescribe drugs and remedial measures in such quantity as it may deem necessary in treating the sick.

New laws and regulations have been and are now being forced upon medical men to such an extent that they can no longer be the judge of their own methods or treatment, but must bow to the prescribed form of non-professional legislators and boards.

State medicine is gradually undermining the ancient and traditional rights of medical practice and, if continued at its present rate, legitimate practice will soon be displaced by a commercial type of cults and advertised self-methods of treatment by patent and proprietary medicines.

Recognizing these deplorable conditions, the American College of Physicians, met in regular assembly, recommends:

(1) That every legitimate effort be made to impress upon the members of Congress that unrestricted medical treatment of disease by properly licensed physicians should be granted, and that they should not be penalized on account of the misuse of medical methods by a very small percentage of so-called medical and non-medical men. Let the profession be its own judge of how it can best treat the sick, and properly penalize those who flagrantly abuse their licensed or unlicensed trust.

(2) That the fellows and associates of the college must become more active in medical legislation and join with their state societies in an effort to repeal inimicable state laws now enforced, and influence a higher type of medical methods for the further protection of the sick and those to whom their lives are entrusted."

Dr. S. Marx White, Minneapolis, Professor of Medicine in the University of Minnesota, was elected President for the ensuing year. Dr. Francis M. Pottenger, Monrovia, California, a specialist in diseases of the chest, was made President-Elect. Dr. Aldred Scott Warthin, Ann Arbor, Michigan, First Vice-President. Dr. Charles G. Jennings, Detroit, Second Vice-President. Dr. John A. Lichty, Clifton Springs, N. Y., Third Vice-President. Regents and Governors were also elected. The total registration for the session was over 1800. The next meeting of the College will be held in San Francisco in 1932—date to be decided later by the Regents. There were over 60 commercial exhibitors of A. M. A. standard type. New Jersey was represented by 85 Fellows and Associates.

A post-convention session of clinics was held in Washington, D. C., on Saturday, March 28. Opportunity was also given to visit the various Government museums, libraries and public buildings.

Among those attending sessions of the Congress were the following doctors from New Jersey:

John Wesley Gray, Edward C. Klein, Jr., and Charles L. Rosenberg, of Newark; Harry Bloch, Arturo R. Casilli, Horace R. Livengood and Michael Vinciguerra, of Elizabeth; John V. Smith, of Perth Amboy; William W. Davies, of Lakehurst; Clyde M. Fish, of Pleasantville; Philip Marvel, Sr., Philip Marvel, Jr., W. Blair Stewart, William W. Fox and Samuel L. Salasin, of Atlantic City; William G. Herrman, of Asbury Park; Frank C. Johnson, of New Brunswick; Richard E. Knapp, of Hackensack; Marcus W. Newcomb, of Brown's Mills; William S. Collier, Barney D. Lavine, Nathan Swern and Harry D. Williams, of Trenton.

The list of newly elected Fellows of the American College of Physicians includes the following New Jersey physicians: Harry Bloch, Elizabeth; Arturo Raymond Casilli, Elizabeth; William Shreve Collier, Trenton; William Walter Davies, Lakehurst; Clyde Mulhollon Fish, Pleasantville; William Wellington Fox, Atlantic City; John Wesley Gray, Newark; William Gettier Herrman, Asbury Park; Frank Chambliss Johnson, New Brunswick and Plainfield; Edward Caffron Klein, Jr., Newark; Richard Edward Knapp, Hackensack; Barney Dolbe Lavine, Trenton; Horace Rutherford Livengood, Elizabeth; Marcus Ward Newcomb, Brown's Mills; Louis Charles Rosenberg, Newark; Samuel Lyon Salasin, Atlantic City; John Vincent Smith, Perth Amboy; Nathan Swern, Trenton; Michael Vinciguerra, Elizabeth; Harry David Williams, Trenton.

## Public Relations

### THE CONTROL OF PROPRIETARY MEDICINE

(From the London letter, Jour. A. M. A., Mar. 7, 1931.)

A bill emanating from the health advisory committee of the Socialist party, to be known as the proprietary medicines bill and intended to regulate the manufacture and sale of such preparations, is about to be brought forward. Its provisions are drastic, and considerable opposition is already announced by manufacturers and pharmacists, but the provisions should with one exception receive approval from the medical profession. It is proposed to appoint a registrar to keep a book containing the names of the owners of all proprietary medicines and full particulars of their ingredients. Every such medicine must be registered and allotted a number, which must figure on any vessel or packet in which it is sold. The advertising of proprietary medicines is to be rigorously censored. No statement that a physician or dentist has recommended such a preparation may be published without his qualifications and address. It may be remarked that this practice is forbidden by the ethical rules of the medical profession. Quotations from medical journals must be accompanied by the name, date and page of the publication. It will be an offense for the vender of a proprietary preparation to invite persons suffering from any ailment to correspond with him with a view to treatment. After 6 months from the passing of the act, no person will be permitted to sell any medicines or appliances purporting to cure or relieve deafness, or any other of 10 ailments mentioned in the bill. The Minister of Health will be empowered to remove from the register any medicine that he considers likely to cause injury if used in accordance with its registered directions. One of the chief objects of the bill is the establishment of a new government department to act as an official censor of advertisements. The trade interests concerned will do everything in their power to oppose the bill, as they maintain that the compulsory publication of formulas would have the gravest effects on well known proprietary business.

### A "WHITE-COLLAR" HOSPITAL THAT IS PROVING THE CASE

(From Newark Evening News, Mar. 9, 1931.)

There has been much talk and some planning toward hospitals for the less than well-to-do and the not-yet-poor in New York and elsewhere in this region. In Boston such a hospital has been in operation a year. The results it has attained are instructive. They justify the belief of some medical men and many others that the problem of the high cost of being sick is not beyond solving.

The hospital is the Baker Memorial, a unit of the Massachusetts General. For a century the latter institution has been primarily for the poor, receiving from its patients only what some of them felt they could contribute toward the cost of what the hospital gave them. In 1917 Phillips House was built and equipped to provide private rooms and the type of service required by those



who do not have to consider cost. There remained unconsidered in the Massachusetts General, as in most hospitals, the great middle class whose means are limited, but whose economic status and self-esteem make them both ineligible for and unwilling to accept charity, even in time of grave illness.

Baker Memorial was constructed to meet this need, \$1,900,000 being provided for the purpose. The first patient was received March 3, 1930. To December 31 it served 1973 patients, whose average income, or the average income of the bread-winners in their families, was \$2101. The average time of their stay in the hospital was 13 days, and the average cost per patient \$158.94. Of this total, hospital charges consumed \$94.48, doctor's fees \$55.71. Total expenses of the institution amounted to \$282,539.19 and total receipts were \$213,-

884.08, leaving a deficit for the 10 months of \$68,-655.11.

This deficit is smaller than was expected. It has been underwritten for 3 years by the Julius Rosenwald Fund to encourage the experiment, and is expected to decline this year to \$35,000. That it may be overcome when the full capacity of 330 beds, of which only 150 are now in use, become available is apparently within the possibilities. Medical and surgical fees are limited to \$150 a patient, no matter what type of service is rendered or over what period. Beds with nursing attendance and ordinary medication range from \$4 in a 9-bed ward to \$6.50 in single rooms. The anesthetic fee is \$5, the operating room charge \$15, with proportionate charges for x-ray and other special services.

## School Health Department

### MINIMUM BIBLIOGRAPHY FOR SCHOOL PHYSICIANS

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton

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## State Health Department

### NARCOTIC CONTROL

D. C. Bowen, Director of Health  
New Jersey State Department of Health,  
Trenton, N. J.

Those interested in statutory control of habit forming narcotic drugs and treatment of addicts are vitally concerned with the proposal of the United States Public Health Service, in April, for further state regulation of narcotics.

The New Jersey Legislature in 1929 enacted Chapter 301 as its latest pronouncement governing prescription and sale of narcotics by recognized authorities subject to state control.

The proposal of the United States Public Health Service made orally April 17 for state assistance in enforcement of the Harrison antinarcotic statute was not a complete surprise to officials of New Jersey. In substance, the plan of the U. S. Public Health Service is modeled similarly to the legal machinery for enforcement of the eighteenth amendment of the United States constitution, i. e. the federal enforcement act synchronizing with the several state enforcement laws on the same subject.

The New Jersey antinarcotic law, Chapter 301 of the Laws of 1929, in general, specifies those who may manufacture, prescribe, sell and distribute drugs in the interest of the conservation of human life in emergencies. Records pertaining to administration of the statute in question, filed by medical practitioners, are confidential, in the archives of the State Department of Health, except for the purpose of enforcing the law, under penalty of a fine not exceeding \$1000, imprisonment of 1 year or both.

The proposal of the U. S. Public Health Service for control of habit forming narcotic drugs and the treatment of addicts embraces those features which are said to be exclusively within the domain of state enactment.

These include laws controlling the sale and use of chloral hydrate, cannabis and peyote, as well as the exemption of preparations containing such drugs or their possession, the sale and possession of hypodermic syringes; the prescribing of narcotic drugs for habitual users thereof; the revocation of professional licenses to practice; the further curtailment of exempt preparations; the commitment of drug addicts to institutions for treatment; the declaring of buildings or resorts where narcotic drugs are illegally sold or used to constitute public nuisance and the instruction in public schools as to the effect of narcotic drugs.

Further the proposal of the United States Public Health Service was outlined as follows:

"So far as the requirements of the Federal law are concerned, they take precedence over state laws and must be complied with, as a minimum, by all persons who are engaged in the sale or use of restricted narcotic drugs. On the other hand, in those instances where State laws are more comprehensive than the Federal law, those more comprehensive requirements are not set aside by the Federal law, but serve to emphasize the need for additional restrictions as to the sale of habit-forming narcotic drugs."

The State Department of Health is calling atten-

tion to the suggestion of the United States Public Health Service at this time in order that there may be adequate consideration of the entire subject by interested parties.

## Communications

### REPORT OF PROSECUTIONS FOR ILLEGAL PRACTICE

(Submitted by Dr. James J. McGuire, Secretary of the State Board of Medical Examiners.)

December 5, 1930, Walter B. Carr, of Millville, a naturopath, was found guilty of practicing medicine without a license.

December 11, 1930, James W. Frazer, a licensed chiropractor, of Bayonne, pleaded guilty in the First District Court of Jersey City to a charge of practicing medicine without a license. The charge against Frazer was based upon the fact that he exceeded his license to practice chiropractic by giving drugs.

December 11, 1930, Roger Henry, Jr., of Trenton, pleaded guilty in the Trenton District Court to a charge of practicing medicine without a license.

December 15, 1930, Dabbi Francisco, who conducted the Little Spanish Homeopathic Drug Store at 153 S. Orange Avenue, Newark, was found guilty of practicing medicine without a license by the Judge of the Second District Court of Newark.

January 15, 1931, Helen Quasdorf, of Clifton, who advertised electric treatments, colonic irrigations, etc., paid the penalty for practicing medicine without a license.

January 21, 1931, Eugene B. Taylor, of Cranford, was found guilty of practicing medicine without a license by the Judge of the Elizabeth District Court.

January 27, 1931, Frank Vermeulen, a chiropractor, of Paterson, was found guilty of practicing medicine without a license by the Judge of the Paterson District Court.

February 11, 1931, Joseph C. Kindler, a physiotherapist, of Jersey City, pleaded guilty in the First District Court of Jersey City to a charge of practicing medicine without a license.

February 19, 1931, Hugh F. Mitchell, of West New York, who held himself out as a medical doctor, was found guilty of practicing medicine without a license by the Judge of the First District Court of Jersey City.

March 4, 1931, Mary Kaczmarek, a licensed midwife, of Perth Amboy, was found guilty by the Judge of the Perth Amboy District Court, of practicing medicine without a license. She exceeded her license by administering pituitrin to patients.

March 4, 1931, Joseph Brander, of South Amboy, pleaded guilty to a charge of practicing medicine without a license in the Perth Amboy District Court.

On the same day Miriam Resnick, a masseuse, of Perth Amboy, paid the penalty for practicing medicine without a license.

March 11, 1931, Hildur Karlson, who conducts the Karlson Baths on the Boardwalk in Atlantic City, paid the penalty for practicing medicine without a license.



On the same day, Kathryn McBride, of Atlantic City, who was giving electric treatments, paid the penalty for practicing medicine without a license.

March 11, 1931, Don D. Modica, of Atlantic City, was found guilty on a second charge of practicing medicine without a license by the Judge of the Atlantic City District Court.

March 30, 1931, Evelyn Wienckiewicz, of Irvington, a naturopath, pleaded guilty in the Second District Court of Newark, to a charge of practicing medicine without a license.

April 4, 1931, Theodore B. Mickley, a masseur of Perth Amboy, paid the penalty for practicing medicine without a license.

April 9, 1931, Paolo Piccone, of Hackensack, was convicted in the Englewood District Court on a charge of practicing medicine without a license. Piccone was giving drugs to his patients.

April 10, 1931, Alfonso De Mercurio, a druggist, of Bayonne, paid the penalty for practicing medicine without a license.

April 14, 1931, William C. Roher, an unlicensed chiropractor, of Bayonne, was found guilty in the First District Court of Jersey City, of practicing medicine without a license.

April 21, 1931, David Decker, of Newark, who prescribed Indian Herb Remedies for his patients and who had been found guilty of practicing medicine without a license by the Judge of the First District Court of Newark, was committed to jail for 30 days.

April 24, 1931, Walter C. Quinn, an electrotherapist, of Plainfield, pleaded guilty to a charge of practicing medicine without a license in the Elizabeth District Court.

January 15, 1931, the Board revoked the license to practice midwifery of Maria Vidale, who had been convicted of practicing criminal abortion.

April 16, 1931, the Board revoked the license to practice midwifery of Sophia Kovacs, who had been convicted of practicing criminal abortion.

## THE AMERICAN COLLEGE OF PHYSICIANS San Francisco, 1932

The American College of Physicians will hold its Sixteenth Annual Clinical Session at San Francisco with headquarters at the Palace Hotel, April 4-8, 1932. Following the Clinical Session, a large percentage of the attendants will proceed to Los Angeles where a program, principally of entertainment, will be furnished April 9, 10 and 11.

Announcement of the dates is made now with a view not only of apprising physicians generally of the meeting, but also to prevent conflicting dates with other societies that are now arranging their 1932 meetings.

Dr. S. Marx White, of Minneapolis, is President of the American College of Physicians, and will arrange the Program of General Sessions. Dr. William J. Kerr, Professor of Medicine at the University of California Medical School, San Francisco, is General Chairman of Local Arrangements, and will be in charge of the Program of Clinics. Dr. Francis M. Pottenger, of Monrovia, is President-Elect of the College, and will be in charge of arrangements at Los Angeles. Mr. E. R. Loveland, Executive Secretary, 133-135 S. 36th Street, Philadelphia, Pa., is in charge of general and business arrangements, and may be addressed concerning any feature of the forthcoming session.

## Woman's Auxiliary

### WOMAN'S AUXILIARY AMERICAN MEDICAL ASSOCIATION

#### Ninth Annual Convention Philadelphia, June 8-12, 1931

General Chairman,  
Mrs. Walter Jackson Freeman

*A message from Mrs. George N. J. Sommer,  
Chairman of the Inter-County Committee.*

Each County Chairman is advised to get as much publicity as possible in the local newspapers about the coming Convention. A photograph of herself or of some other member who is active in the County Auxiliary will not only awaken interest in the Convention but will also create interest in the work of the Auxiliary. Mrs. Freeman, our General Chairman, hopes one of the results of the Convention will be an increased membership in the County Auxiliaries.

Here is one announcement that must be given circulation—All members of the Woman's Auxiliary to the American Medical Association desiring hotel reservations, and who are coming unaccompanied, kindly send request to—

Mrs. Frederick S. Baldi, Chairman,  
Hotel Committee, Woman's Auxiliary,  
Room 304, Chamber of Commerce Bldg.,  
1129 Walnut Street,  
Philadelphia, Pa.

On Monday, June 8, at 4.15 p. m. there will be another general meeting of all the committees at the Bellevue-Stratford. Mrs. Freeman will preside.

Please read the above announcements carefully, note the dates and take action on the publicity.

#### WOMEN AT THE A. M. A. MEETING

A message from Mrs. Walter Jackson Freeman  
The Woman's Auxiliary to the American Medical Association has been placed in charge of all entertainment of women visitors, and began its labors in June 1930 by engaging the whole Roof Garden of the Bellevue-Stratford Hotel for the period of the convention. All women's activities will center in this hotel—registration, meetings, luncheons and supper dance, and all excursions will start from the Broad Street entrance. Invitations and tickets must all be procured in the Roof Garden *in advance*, as nothing but programs will be obtainable elsewhere. Members of the A. M. A. are invited to join all excursions, and should register for them in advance in the Roof Garden. Rooms for State Headquarters have also been reserved in the hotel, and sponsors will be appointed to look after all women registered from their own states. The list of sponsors will be printed in the program. The chairman of the Women's Hotel Committee is Mrs. Frederick S. Baldi, 2117 Porter Street, Philadelphia, who will be glad to make any desired reservations.

The convention will open with a subscription buffet luncheon in honor of all National Auxiliary Presidents from Mrs. Red to Mrs. McGlothlan, im-

mediately followed by 3 round tables of 35 minutes each, with 10 minute intermissions, each under expert leaderships. The subjects will be:

- (1) Programs for County Auxiliary Meetings.
- (2) The Technic and Value of a Committee on Public Relations.
- (3) History and Archives.

These informal gatherings will be a sort of preliminary canter, designed to bring together those interested in special phases of auxiliary work and give them opportunity to discuss the subject thoroughly during the following days. The National Board dinner and pre-convention meeting are scheduled for Monday evening.

A new and, we hope, helpful feature will be a Question and Suggestion Box to which we beg all with good ideas to contribute. This seems the most practical way of finding out what our members want continued, what discarded, and what plans are indicated for the future.

The regular business sessions will be held on Tuesday and Wednesday mornings. National Chairmen will be allowed 10 minutes for their reports, State Presidents 3 minutes. Reports to be printed may be as long as desired (in reason), but let no one reporting on the floor imagine these limits an idle jest. Nor will the hours announced on the program be found to mean "about". Have your watches cleaned and regulated, and practice your wrist drill before leaving home. You will need it.

Thursday morning, too, will be a busy one, the post-convention Board Meeting, a special meeting for state and county treasurers desiring further elucidation of the treasurers' receipt blanks, and at 10.30 an informal round table presided over by the new president, the subject, "What Have I Gotten Out of the Convention?" At this meeting, Mrs. McGlothlin will announce her committee chairmen and outline her plans for the coming year, and the subjects in the Question Box will be discussed; a sort of stock taking, closing the year's business, and opening the new books.

Philadelphia as an historic and cultural center is the keynote of the entertainment planned for our guests. Except Monday, all afternoons and evenings will be devoted to pleasure, and a variety of excursions is offered to suit all tastes, all physiques, and all weathers. They include bus trips to Valley Forge and to Longwood, the beautiful estate of Mr. and Mrs. Pierre S. du Pont, a boat trip on the Delaware, and visits to the Fairmount and Rodin Museums and to the Historical Society of Pennsylvania. The Museum authorities are delighted to provide escort service for those desirous of more than a passing glance at their treasures, and the Historical Society will arrange a special exhibition for the week, including portraits, prints, and engravings, documents, silver, etc., from its unsurpassed collection of Americana. There will also be a brief historic address by Dr. Charles W. Burr, of Philadelphia.

Wednesday will be a field day—the big Auxiliary Luncheon—with guests and speakers from the A. M. A. and a beautiful musical program, the gift of the Delaware Auxiliary. In the afternoon the Philadelphia County Medical Society invites the women to be guests on a bus trip through historic Philadelphia (a 10 minute stop at Independence Hall), Fairmount Park and Germantown to "Stenton", where the New Jersey Auxiliary invites us all to tea. "Stenton", the home of James Logan, Penn's friend, Secretary of the Colony, still stands just as it was built in 1728, the furniture of the period, the garden laid out as described by contemporaries. On Wednesday evening the

Pennsylvania Auxiliary invites all visiting ladies to a reception in the superb Chinese Rotunda of the University Museum, a setting probably unsurpassed in any museum anywhere.

This meeting of the A. M. A. in Philadelphia is the first in 30 years, and the County Medical Society, desiring to mark so auspicious an occasion, and also in appreciation of the work of the Auxiliary, invites all members of the A. M. A. and the visiting ladies to be its guests at a supper dance in the Ball Room of the Bellevue, following the big meeting of the A. M. A. on Tuesday evening at the Academy of Music. The President's ball at the Benjamin Franklin Hotel on Thursday evening, to which all are invited, will close the formal festivities.

To those still able to rise from their beds on Friday morning there are offered a tour of Wanamaker's with luncheon in the Crystal Tea Room, or an all-day bus trip to Atlantic City, where the New Jersey Auxiliary will meet them for luncheon at the Claridge. This program includes also a visit to the new Convention Hall, an hour in a chair on the Boardwalk, and plenty of time for window shopping or a swim.

And finally, every day and all day there will be a booth in the Roof Garden inscribed "As You Like It"—Anywhere, where those wishing to golf, shop, go to Garden Days, or carry out any other pet project not elsewhere provided for, may find information and assistance in making a profitable use of their opportunity.

Will you not reward our efforts by the largest and most enthusiastic women's attendance in the history of the American Medical Association?

#### Atlantic County

Mrs. Maurice Chesler, Secretary

The last regular meeting of the Atlantic County Medical Society Auxiliary was held Friday evening, May 8, at the Chalfonte Hotel, Mrs. J. T. Beckwith presiding.

At a public card party given at the Claridge Hotel, Wednesday, April 29, the amount of \$75 was cleared, and will be placed in the Welfare Fund. Five-o'clock tea and refreshments were served complementarily by the Claridge management. Mrs. James H. Mason, 3rd, was in charge of this party, assisted by an able committee.

Another delightful affair was held at the Claridge on Wednesday, May 20, in the form of our annual spring luncheon and bridge. Floral decorations adorned each table and bird-nest plants were given as prizes. Violin selections were beautifully rendered by Mr. William Stokking, of the Claridge Orchestra. Mrs. James H. Mason, Chairman, was assisted by Mrs. J. T. Beckwith, Mrs. W. Blair Stewart, Mrs. Robert A. Bradley, Mrs. Lawrence A. Wilson, Mrs. James North, Mrs. Percy C. Joy, Mrs. D. Ward Scanlan, Mrs. Samuel L. Salasin and Mrs. Maurice Chesler.

Mrs. J. T. Beckwith graciously welcomed 5 new members to our Auxiliary, namely: Mrs. Henry O. Reik, Mrs. Stanley M. McGeehan, Mrs. J. C. Marshall, Mrs. Harry Subin, Mrs. B. B. Barab.

Interesting accounts were given by Mrs. James North, Mrs. Percy Joy and Mrs. J. T. Beckwith, who attended the Washington trip sponsored by the Philadelphia County Medical Auxiliary.

Mrs. John F. Massey spoke of the coming convention and arranged for her committee to assist in receiving the national delegates and their



friends upon their visit to Atlantic City on June 12.

After the meeting social hour and cards were enjoyed.

**Gloucester County**

Reported by Mrs. Henry B. Diverty

The Woman's Auxiliary to the Gloucester County Medical Society met Thursday evening, May 21, at 9 o'clock, at the Woodbury Country Club, the same hour and place of meeting of the medical society.

The President, Mrs. Elwood Downs, was in the chair, with the following members present: Mrs. David Brewer, Mrs. William Brewer, Mrs. J. Harris Underwood, Mrs. Oram Kline, Mrs. Henry B. Diverty and Mrs. Downs, of Woodbury; Mrs. Ralph Hollinshed, of Westville; Mrs. C. I. Ulmer, of Gibbstown; Mrs. Wandell, of Clayton. Considering the heavy rainfall all day and evening the attendance was fine.

After adjournment the ladies were invited to hear Prof. Pennock, after which all partook of a collation served by the Country Club chef.

**Mercer County**

Reported by Mrs. George N. J. Sommer

Delegates to represent the Woman's Auxiliary to the Mercer County Medical Society at the meeting of the Auxiliary of the Medical Society of New Jersey to be held at the Berkeley-Carteret in Asbury Park, during the first week in June, were elected at a meeting of the members on May 12, at the State Home for Girls. They are: Mrs. D. Leo Haggerty, the president; Mrs. A. Dunbar Hutchinson and Mrs. Alton S. Fell. The alternates are Mrs. James J. McGuire, Mrs. D. M. Yazujian, and Mrs. J. Otto Denelsbeck.

Plans were discussed for the tea to be given at "Stenton", the home of the late General Logan, in Philadelphia, by the Auxiliary to the State Society on Wednesday, June 10, in connection with the meeting of the American Medical Association.

Preceding the meeting, which was arranged by Mrs. G. N. J. Sommer, the members made a tour of inspection of the school and classes while in session. Mrs. Kate Burr Johnson, superintendent of the home, entertained the members at tea following the session. There were about 30 present.

**County Society Reports**

**ATLANTIC COUNTY**

John S. Irvin, M.D., Reporter

The regular monthly meeting of the Atlantic County Medical Society was held Friday night, May 8, in the Chalfonte Hotel. The President, Dr. Norman J. Quinn, called the meeting to order at 8.30 p. m. The Secretary, Dr. Joseph H. Marcus, read the minutes and since there were no corrections they were accepted as read.

**Board of Censors:** The applications of Drs. Robert Durham and Anthony Merendino were approved. The application of Dr. Van Delein for Associate Membership has not been turned down but merely is being held over until September as

he has not been practicing dentistry more than 8 months here and we are merely following a precedent in not accepting a man for membership unless he has been in practice here for at least a year.

**Public Health and Sanitation:** Dr. Stewart reported that the State Board has investigated a great many men and women here who are acting contrary to law. They are always trying to keep after these irregular practitioners. He said that it was the duty of the members of the society to report the names of these individuals who are practicing illegally. Two names have been handed to him recently.

\*At our last gathering, jointly with the Council-or District Meeting, we couldn't take any action on the death of Dr. George Scott. I want now to say a word in regard to Dr. Scott. He was born in New York City, in 1849, and graduated in medicine in 1871. In professional work in New York he was quite successful. As you all know, he was a married man and had 2 sons. Unfortunately, one was taken ill and died, and the second was taken ill and on account of that boy's health he came to Atlantic City in 1903; and many of you remember that in later years that son was taken ill with pneumonia and subsequently died. It was a great cross to Dr. Scott and his wife. Recently, the doctor passed away at the age of 81 years.

I am glad to recall that in 1925 the Atlantic County Medical Society honored him upon the fiftieth anniversary of his graduation, and at the same time honored Dr. Marvel, who had not quite reached his fiftieth anniversary."

Inasmuch as Dr. Scott was such an honored member of our society I would like to move, Mr. President, that a page be set aside in our Minute Book in his memory. This motion was adopted.

Another member of our society is very ill in the hospital—Dr. Thomas Taggart.

It was also moved and carried that a letter with the society's best wishes for an early recovery be sent to Dr. Taggart.

**Special Committee:** Dr. Harvey reported that the committee met and decided to enter the "Know Your City Day Fair". We have completed all our arrangements and I believe we are going to put over a very fine show. We are going to have a lot of moving pictures. The lay people will undoubtedly ask a lot of questions and in order that someone may be there to answer questions I feel that some younger men should be there, or else I wish some of the other men would volunteer to stay there either a part of or a whole day.

The President asked Drs. Timberlake and Merendino to stay in the booths on Monday.

A letter was received from Dr. Barbash in which he acknowledged his appreciation to the society on the courtesies extended to him on his wife's death.

A letter was also received from Mrs. Scott thanking the society for the courtesies shown her on the death of her husband.

The president announced that Drs. Mason, Johnson and Reyner comprise the Entertainment Committee for the June meeting, which is in the form of an outing.

The president then introduced the speaker of the evening, Dr. Joseph C. Doane, Associate Professor of Medicine, University of Pennsylvania Graduate School of Medicine, who spoke on "The Etiology, Diagnosis and Treatment of Diseases of the End Arteries". (To be published later in the Journal.)

### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The regular monthly meeting of the Atlantic City Hospital Staff was held April 24, with the president, Dr. Milton S. Ireland, presiding.

The scientific program was opened by Dr. Gerald A. Cyr, who spoke of "Barbituric Acid Derivatives and Their Toxic Manifestations".

Much has been written about the therapeutics of the barbituric group of acids, but strange to say very little work has been done, or should I say reported to date, regarding toxicity. In an effort to obtain the best information regarding this topic, I wrote to the American Medical Association and am allowed to use the various clippings and articles collected relative to this matter. Even then I found it very difficult to correlate the material because all the articles dealt mainly with the toxic effects of 1 or 2 of these acids chief among which were the toxic effects of barbital itself. Finally, I wrote to the Eli Lilly Company, but was again discouraged by finding no literature on the relative toxicity of the barbituric group of acids.

Just a few words might be said at this time about the chemistry of this group of acids. That part of the barbituric acid residue which is responsible for the production of sleep is of interest. Urea is capable of acting as a hypnotic only when combined with radicals rich in carbon, and it is most effective in the cyclic arrangement found in barbituric acid. Dox believes that to induce hypnosis without extreme untoward effects, the molecule must possess substituents on the number 5 position, which is the methylene group of the melannic acid radical.

Few, if any, of the reports dealing with a derivative of barbituric acid have included descriptions of all the associated toxic symptoms, but I have included the toxic symptoms which have been described.

(1) *Cutaneous Rash.* Littenfield, in 1903, pointed out that one disadvantage of diethyl barbituric acid was the erythema which it might produce; similar to that of antipyrène. A case is reported, where a man took 4.25 gm. in 2 days and 8.5 gm. in 3 days, with the following manifestations: erythematous rash; tenderness in the region of the right mastoid process; discharge from the right ear; temperature 101°; pulse rate 125; delirium and semicoma; but recovery was prompt after the drug was stopped. In 1907, House reported on cutaneous eruptions after a dose of 1 gm. diethyl barbituric acid. He also pointed out that cutaneous eruption is the most constant symptom following all but the most rapidly fatal dose. Tardieu pointed out that the rash usually appeared only in subacute cases or during convalescence from severe poisoning, and generally constitutes favorable prognosis.

Blamoutier reports the case of a woman who took several doses of diethyl barbituric acid without any symptoms; 5 months later, she took 5 gm. the same drug and an erythema developed; 15 months later she took 20 drops of somnifene and in 10 minutes erythema and edema of the face and buccal mucosa developed. This illustrates the danger of giving any other derivative of barbituric acid to a patient who already has shown intolerance or sensitivity to one member of the barbituric group.

*Coma.* Symptoms of a serious overdose are coma and stupor. Many cases have been reported. Farncomb reports a case where a woman was

totally unconscious for about a day; in 2 days temperature was 102° with anuria; next day temperature 103°, pulse rate 160-180, and consolidation was beginning at the bases. Fever soon rose to 104° and the lungs became totally congested. The temperature continued to rise at the rate of ½° every ½ hour until it reached 107° by axilla, and death occurred. This brings out a point, the so-called barbituric acid fever, which may be the result of pulmonary congestion, and only indirectly due to the drug.

*Eye.* Pupillary changes may be observed from diethyl barbituric acid poisoning. Reports of cases of acute poisoning show that the lethal dose varies from 30 to 200 grains. A patient took 150 gr. and was comatose for a few hours. There was complete muscular relaxation and abolition of all tendon and cutaneous reflexes; pupils were fixed and did not react to light or accommodation; Cheyne-Stokes' respiration developed. The following day there was evidence of congestion of both the lungs, a cutaneous eruption developed, and the patient died. It is evident from one of these reports that ocular phenomena are incident to poisoning from barbituric acid but these signs are not pathognomonic of poisoning from barbital and only call attention to the effects of these drugs on the reflexes.

Farnell, in 1913, reported 2 cases in each of which it was evident that action of the drug did not manifest itself until the cumulative effect had set in. He pointed out that 5 gr. luminal has about the same action as 8 gr. veronal. In 1925, Weig reported a case of fatal poisoning by this drug. A woman, 67 years of age, suffering from arteriosclerosis, died 39 hours after she had taken 15 gr. luminal. This should call attention to the decreased tolerance of those of advanced age. Many cutaneous eruptions have been reported from large doses of luminal.

Hang, in 1919, reported 2 cases of epilepsy in which 1½ gr. of luminal t.i.d. had been prescribed. In 4 weeks in 1 case, and 11 days in the other, from the time that this treatment was begun, the patient suffered from high fever, diarrhea with mucous stools, and eruption resembling scarlet fever covering the whole body except the hands and face. The total amount taken by first patient was 126 gr.; the second 50 gr. The first patient was slightly stuporous, the second had albuminuria. After suspension of the drug, the symptoms subsided in a few days.

*Rutonal* is closely related to luminal and both have been used clinically with about the same results, and their toxic effects are about the same.

*Dial* has produced toxic effects. Zuelchour, reporting on the administration of 800 doses of dial to 25 patients, noted transient vertigo, but observed that a rapid tolerance to dial develops. Christofel, in 1918, pointed out that 3 gr. of dial is equivalent to 8 gr. veronal and 30 gr. chloral hydrate. Buchel, writing on poisoning from dial, pointed out that death is due to respiratory paralysis and that the cardiovascular system is little affected. He felt that fewer cases of poisoning from this drug had been reported and that the essential signs of poisoning from dial are slight dyspnea and coma.

*Somnifene.* Zaffison reports upon a man 24 yr. of age who took 2.4 gm. of the drug and was unconscious for 24 hr. with complete retention of urine which persisted for another 24 hr. He was treated with gastric lavage and salt solution, and recovered in 3 days without complications. He believes that this drug should not be used for



postoperative pain as it increases the percentage of postoperative thrombosis.

*Amytal* has been used in large and small doses with results comparable to the other derivatives of barbituric acid. It has been uniformly observed that in overdose it lowers the blood pressure; particularly true in cases where there is arteriosclerosis and hypertension. Some men have called attention to the advantages and disadvantages of *amyltal*. The extreme quietness following operations increases the likelihood of postoperative pneumonia or massive pulmonary collapse. There can be no question that when excitement or pulmonary complications follow the use of *amyltal*, too much of the agent has been used or the blood pressure has been lowered to a critical point.

The clinical lesson which one should learn from this short review is that the speed with which a derivative of barbituric acid takes effect depends on the route of administration of the drug. However, and this is the important factor, the depth of hypnosis or the anesthesia produced is not essentially based on the route of administration, but on the dose used. If a dose larger than the hypnotic one is to be used, then it is safer to follow the intravenous method; otherwise, it is safer to use divided doses.

In conclusion, allow me to emphasize the following important points: (1) One must remember that all derivatives of barbituric acid are as potent to do great damage as they are to do good, if given in too large doses. Fatal results have resulted from overdose of each member of the group.

(2) One must keep in mind that to administer the drugs daily for a long period of time might result in poisoning due to the cumulative effects, especially *barbital*, which is only slowly eliminated from the body.

(3) One must also remember that a patient can easily become sensitized to the drug, and that to re-administer the drug to him at a later date might produce in him an anaphylactic reaction.

(4) Finally, that no 2 patients will respond in the same manner to these drugs, each patient being a problem in himself, and that it then becomes the duty of the physician to carefully watch his patient for the slightest evidence of intoxication.

*Dr. Louis Downs* spoke of "Sodium, *Amytal* and Its Chemical Uses, with Especial Reference to Value as a Pre-Anesthetic Agent".

Before going into the chemistry, I would like to review the general pharmacologic features of *sod. amyltal* and other barbituric acids.

(1) Barbituric acids are primarily hypnotics; only occasionally will hypnotic doses produce analgesia or anesthesia.

(2) There is a marked variation in effect, and selection of proper dosage is difficult.

(3) Doses that will cause deep hypnosis may seriously embarrass the respiratory and circulatory systems.

*Amytal* and *neonal* are not recovered in the urine. Intravenous injection of as much as 22 gr. *amyltal* failed to give traces in urine; evidently *amyltal* is completely destroyed in the body.

Opinion is divided as to the carbohydrate metabolism, some stating that hyperglycemia and glycosuria follow administration of *amyltal*; while others find no effect. Animals with high blood urea showed no untoward effects from *amyltal* and the dosage needed was less—indicating that the drug does no harm to the kidneys. Patients receiving *amyltal* as a pre-anesthetic took fluids

more freely the following day and nausea was absent, or rather they had greater freedom from it.

When injected intravenously the induction of sleep is rapid and quiet. Drowsiness, yawning and slurring of words come on after administration of 3-9 gr. Increase in dosage causes reflex hypersensitiveness but finally produces profound narcosis. Patients are very restless and time is required before patient is calm and reposed. This narcosis lasts from 3-6 hours. Afterward they are drowsy, but are coöperative in taking fluids.

Patients who have experienced other operations under ether claimed that *sod.-amyltal* made their present operation a pleasure in contrast to the previous one. For exophthalmatic goiter and other apprehensive excitable patients, *amyltal* has a definite place in anesthesia.

Mason and his associate call attention to the individual susceptibility; dosage ranging from 3-9 gr. in their report. Old debilitated patients fall asleep with 3-5 gr. and robust patients need 7-9 gr. From their observations in 305 cases, the patient slips away into a sleep that certainly, to all appearances, resembles physiologic sleep. In only 1 instance was there any evidence of excitement during the induction of sleep by *sod.-amyltal* or by the later induction of deeper anesthesia by inhalation anesthetics.

Lundy used it orally in doses of 6-9 gr. in 730 cases and observed little if any nausea or delirium and there were no respiratory difficulties. By intravenous route he used it 457 times to produce part or all of anesthesia. He calls attention to the rapid injection of the drug and following large doses he observed delirium, edema of lungs, pneumonia and inability to raise mucus after thyroidectomy and stated these as an objection to the use of the drug as a sole anesthetic.

The uses of this drug, other than pre-anesthetic, include the control of convulsions from any cause.

*Dr. V. Earl Johnson* reported the Surgical Services of *Dr. Thomas Taggart* and himself for the months of November and December 1930, and January 1931.

During this tour of service, of approximately 3 months, there were admitted 190 patients. Of this number, 93 were of traumatic origin; or approximately 50%; 133 operations were performed. There were 17 deaths this year, or about 9%, as compared with an 8% mortality rate last year; 10 of these deaths occurred with patients who had been operated upon—a post-operative death rate of approximately 7.5%, as compared to an 8% rate, last year.

The question of choice of anesthesia on our service has been given considerable care and it has been interesting to make a comparative study. A tabulation shows that we used: Nitrous oxide with ether, 14 times; nitrous oxide alone, 40; spinal anesthesia, 22; avertin—either alone or combined with nitrous oxide or local, 14; local field block or local infiltration, 15; chloroform, 2; ether-oil colonic, 1; sodium *amyltal* preliminary, 5.

*Dr. Robert A. Kilduffe*, Director of Pathologic Laboratories, presented his report for 1930, which comprised a total of 45,305 reports made. The volume of work can best be appreciated by estimating its book value, amounting to \$132,930, an increase of \$25,706 over 1929. In addition to the laboratory work done for the hospital as an entity, work was also performed for the Municipal Hospital, Betty Bacharach Home, Board of Health, Asylum, Almshouse, and Pine Rest.

There were 19 publications issued by Dr. Kilduffe in various journals in the United States and abroad.

### BERGEN COUNTY

C. H. Littwin, M.D., Reporter

About 35 members attended the regular monthly meeting which was held at Bergen Pines by invitation of Dr. Morrow. The minutes of the last meeting were read and approved, as were also those of the Executive Committee.

Dr. Kilts reported for the Credit Protection Committee, that he felt the only satisfactory credit bureau would be one organized and supervised by the physicians themselves. He will submit a proposition for consideration at the next meeting.

The Public Relations Committee announced through Dr. Wolowitz that the broadcasting has come to an end for this year; he also stated that the Post-Graduate Course is proving very successful; 31 men taking it.

Drs. Wilson and Pallen spoke on the proposed organization of a Cancer Clinic.

Dr. Levitas spoke of the difficulty in arranging a program for the June meeting, which conflicts with the A. M. A. Convention, and at his suggestion a straight business meeting was ordered.

Dr. Neil McLeod Whittaker was elected to membership. Dr. R. M. Anderson, a former member, was reelected by transfer from the Minnesota Society. Dr. Frank L. Niles, of Hackensack, was elected by transfer from the Lackawanna County Society of Pennsylvania.

The applications of Joseph Bono, of Northvale; Luke A. Mulligan, of Leonia; and Herman Feit, of Hackensack; for associate membership, were read.

The death of Dr. Max Wyler, of Fort Lee, formerly president of the society, was reported. A motion was adopted that the President appoint a friend to draw up resolutions for the society to adopt.

The proposed County Laboratory was endorsed by the society.

Dr. Levitas introduced Dr. Reuben Ottenberg, Associate Physician of Mt. Sinai, who spoke at length on "Diseases of the Liver and Their Treatment". His talk opened up many new concepts of liver conditions which are now being unfolded by research workers. Many new tests of different liver functions are being developed, and these he explained. It is certain that a great deal more attention will be focused on this important organ in the future, both from the viewpoint of tests for incipient disease and for treatment.

### Second Councilor District Meeting

(Reported by the Councilor, Dr. Snedecor)

The delegates and officers of Hudson, Sussex, Passaic and Bergen County Medical Societies met for dinner at the Oriental Club, at Hackensack, April 29.

This meeting, admittedly an experiment, brought together 37 representatives of these medical groups. All of these men were empowered with the responsibility to carry back to their constituencies the proceedings in which they all had an opportunity to take part and then to carry them forward to the State Convention.

Dr. Harry Perlberg, Secretary of the Hudson

County Society, presided. Dr. Spencer T. Snedecor, as Councilor for the district, welcomed the group to Hackensack. A brief talk on the opportunities for constructive action by this group was given by Dr. Quigley, Third Vice-President of the State Society.

The first topic on the program was introduced by Dr. Coleman, of Sussex: "Shall the Physicians Seek to Amend the Hospital Lien Law to Include Doctors and Nurses?" This was forcefully discussed by Drs. Pollak and Kuhlman. Dr. Quigley's motion was passed, without a dissenting voice, as follows: Resolved that the Welfare Committee of the State Society be urged to secure, if possible, at the coming session of the legislature an amendment of the hospital lien law to include doctors and nurses.

Dr. Waters, of Hudson, presented a careful résumé of the attitude of other states, Canada, and Europe, on the "Problem of Licensing Specialists". He then submitted a carefully thought out plan for proper accrediting and control of specialists and specialism by the State Medical Society. In principle, this was heartily approved and was felt to deserve consideration by the State Society. It was discussed by Drs. Kelley, Littwin, Schwarz and Levitas. It was moved that the plan be referred to the Welfare Committee of the State Society with the request that a special subcommittee be appointed to consider it and report next year.

Dr. Joseph R. Morrow, of Bergen, opened a discussion on the "Supervision of Public Health Nursing", and was followed by Drs. Knox, Maris and others.

"The Need for Better Public Relations Through County Medical Society Publicity" was spoken of by Dr. Spencer T. Snedecor, of Bergen. This was discussed and the following motion passed: Resolved that the State Medical Society be asked to appoint a special committee for the promotion and supervision of county society publicity.

Dr. Harry Perlberg, of Hudson, spoke on the problem of "Medical Charity". He was closely seconded by Dr. Hasking who spoke at length on the new state poor laws, which make the medical care of the poor a direct municipal responsibility. He said he felt that most of the problems of free medical service would be worked out by municipal payments.

Dr. Wilbur, of Sussex, presented for consideration a "Plan for Continuing Immunization Against Diphtheria". When a certain percentage, possibly 80 to 90%, of the children have been immunized in a school, it should be made a requirement for admission, and the immunization should be done by the family physician.

Dr. Wayne Hall, of Passaic, discussed the subject of "Preschool Examinations", and urged the need for a campaign to encourage this work.

When the meeting adjourned it was felt that a great deal of fruitful discussion had been held on topics which are of vital interest to the general profession. More than that, many new friends were made among the delegates of other societies whom we expect to meet again at Asbury Park in June.

### PLAN FOR PROPER ACCREDITING AND CONTROL OF SPECIALISTS AND SPECIALISM BY THE STATE MEDICAL SOCIETY

(I.) Formation of a State Society Committee on Credentials for accrediting members for special practice, with subsidiary county committees to refer approved applicants to the state committee for action. These committees might be formed as follows: State—President, ex-officio, the Chair-



man of the Welfare Committee, Chairman of Publicity Committee, Chairman of Board of Trustees, and member of the State Examining Board.

County—12 members, with the president ex-officio; the members to be chiefs of departments or ranking attendings in their respective hospitals, and members of the colleges or groups now nationally accrediting physicians for special practice, apportioned as follows: Surgery 2, Medicine 2, Obstetrics 1, Eye and Ear 1, Nose and Throat 1, Roentgenology 1, Genito-Urinary 1, General Practice 1, Gynecology 1, Pediatrics 1.

(II.) Requirements for Acceptance as Specialists:

(1) Those accepted by the respective groups of specialists gathered under the following Societies and Colleges:

- (a) American College of Surgeons.
- (b) American College of Physicians.
- (c) American Society of Obstetricians and Gynecologists.

(e) American Boards of Otolaryngology and Ophthalmology.

(e) American College of Radiology and the Radiologic Society of North America.

(f) American Society of Psychiatrists.

(2) Accrediting by Recognition of Experience:

(a) Men in practice longer than 10 years who have been notably identified with certain branches of medicine and surgery and who are accepted in their communities by their fellow practitioners as competent in the field to which they are giving special attention.

(b) Men in general practice, holding a hospital service in a special branch of medicine, which service is sufficiently active to allow of attainment of a high degree of proficiency in that branch of medicine. The duration of appointment must be not less than 5 years.

(c) Properly qualified and trained men, not classified in (a) and (b). Those of ample hospital and post-graduate training in practice 5 years or more, who furnish proof of qualifications which are acceptable to the State Committee on Credentials.

(III.) Distribution of Information Regarding Accrediting of Members for Special Practice and those so Accredited:

(1) Newspaper notices, prepared by County Committee on Credentials and certified by the State Committee on Credentials.

(2) Radio talks; best through the State Committee.

(3) Through agency of the medical profession; office placards and pamphlets on the subject of "Choosing a Specialist".

(4) Display of Certificate issued by the State Society through the State Committee on Credentials for Special Practice.

(5) Distribution of information through a Central Information Office in each county medical district; (a) Physicians' and Surgeons' Telephone Exchange; (b) Secretary's Office of the County Society.

## BURLINGTON COUNTY

Roscius I. Downs, M.D., Reporter

A regular meeting of the Burlington County Medical Society was held in the Community House, Moorestown, Friday, May 15. The President, Dr. Joseph M. Kuder, called the meeting to order at 2.15 p. m. by asking all present to take their places at the dinner table and join in the repast.

Dr. Kuder asked the guests to arise when he announced their names, as follows; from the Bucks County Medical Society, of Pennsylvania—Drs. W. M. Le Compte, J. F. Wagner, James Collins, Joseph Abbott, Frank Lehman and Miss Lehman; Drs. John C. Hurst, P. Brook Bland and R. P. Andrews, of Philadelphia; Dr. Frank Wood, resident physician at the Burlington County Hospital.

Immediately following dinner the minutes of the March meeting were read and approved. The Secretary reported that return questionnaire postcards had been sent to all members of the society, requesting an expression of opinion on the following questions: Do you prefer that meetings of the society be held in the Burlington County Hospital or elsewhere in various communities in the county?—Do you prefer that scientific papers be presented by outside men or by members of the society?—If you prefer the latter, will you present a paper if requested to do so?—Do you think a meal a desirable adjunct to meetings? The Secretary reported that of the 50 cards sent out, 34 had been returned, which tallied as follows: 13 in favor of meeting at the Burlington County Hospital; 17 in favor of meetings elsewhere; 22 were in favor of having men from outside the county present scientific papers; 22 thought a meal a desirable adjunct to a meeting.

The Board of Censors having reported favorably on the application of George J. Wagner, of Delanco, he was elected to membership.

Dr. Eugene A. Meyer, of Moorestown, who had been elected to membership at a previous meeting, signed the constitution of the society after having responded affirmatively to the declaration made by the President, Dr. Kuder, to comply with the constitution and by-laws of the society.

Dr. Kuder announced for the Woman's Auxiliary that a dinner dance and card party would be held at Log Cabin Lodge, Medford Lakes, on Tuesday, May 26, at 7.30 p. m.

The Burlington County Auxiliary has a very active and efficient organization and its members have expressed eagerness to cooperate with the society in any suggested work. Dr. Kuder suggested in matters of health education particularly, in which the physician with grace and propriety cannot extol the value of his own services, the auxiliary may render noteworthy service in arranging meetings between the public at large and the medical profession.

It was regularly moved and seconded that the president appoint a committee of 3 or 5 to be known as the Public Relations Committee.

The secretary reported that the Fourth Councilor District Meeting, held at Lakehurst on May 1, had the largest attendance of any of the district meetings in the state, there being 170 present. The combined social outing with an instructive scientific evening, by our host—The Naval Medical Corps—was well worth while. Such meetings should make for more widespread acquaintance among the members of the profession in Burlington, Camden, Monmouth, and Ocean Counties, and thus better the fellowship at the Annual Meeting of the State Society.

Dr. Edward R. Hunter, Chairman of Section Gynecology and Obstetrics, announced the program, and introduced Dr. John Cooke Hirst, of Philadelphia.

Dr. Hirst, after an impromptu talk on sterility, demonstrated by manikin the contraceptive technique used by the Maternal Welfare Clinic at 69th

Street, Philadelphia. He said that many patients from New Jersey were coming to the clinic and that no one was treated unless she presented a note from her physician requesting it. Dr. Hirst thought the physicians in New Jersey should take up the matter of opening a clinic in this state.

Dr. P. Brook Bland, of Philadelphia, demonstrated by moving picture film the "Trichomonas" with discussion of the most frequent gynecologic symptom, leukorrhea, and certainly presented his subject in a most interesting and instructive manner. Leukorrhea is a symptomatic expression of a disease, with variable clinical characteristics, and is usually treated in an unscientific manner. Trichomonas is quite prevalent in the colored race. Usually the patient has very little distress except the bubbling, yellowish discharge. Diagnosis of the parasite can be confirmed by the microscope. The exact pathology is not yet proved and the source of infection is not known. The parasite has never been found in the intestinal tract. The important point in treatment is mechanical cleansing by vigorous scrubbing of vaginal mucous membrane with tincture of green soap, a vaginal douche of Lugol's solution and water at night, followed by an alkaline douche in the mornings.

Drs. Bland and Hirst were given a vote of thanks from the society.

The society adjourned to meet in September, there having been 31 members and 9 guests present.

#### CAMDEN COUNTY

Robert S. Gamon, M.D., Reporter

The regular meeting of the Camden County Medical Society was held in the City Dispensary Building, Tuesday, May 5, 1931, at 9 p. m., with Dr. W. J. Barrett presiding.

The scientific paper of the evening was presented by Dr. Frank C. Benson, of Hahnemann Hospital on "Radium in Prostatic Pathology". The essayist gave a most instructive discourse on radium and radio-activity and then gave the results of his clinical and experimental work with radium in prostatic pathology. The paper was discussed by Drs. A. H. Lippincott, D. F. Bentley, Jr., and Albert Bothe, by invitation.

The Committee on Public Relations presented a report which was accepted by the society. Its recommendation included the establishment of a Public Speaker's Bureau, sponsored and endorsed by the county society and consisting of members of the society who would be available to address public gatherings. The committee reported negative findings on newspapers and radio publicity.

The next meeting of the Camden County Medical Society will be held in conjunction with the annual outing of the combined societies of Camden County. The date has not as yet been announced.

The meeting was well attended.

#### ESSEX COUNTY

E. LeRoy Wood, M.D., Reporter

The economic problems of the physician continued to hold attention of the Essex County Medical Society at its meeting held Thursday evening, May 14, at the Academy of Medicine, 91 Lincoln Park, Newark.

Dr. Charles Gordon Lloyd, President of the New York County Medical Society, spoke on "Modern

Medical Problems and the Practitioner". He pointed out that physician's fees play a very small part in the high cost of medical care, a subject being featured in many lay journals. He said that a report would shortly be rendered by a commission studying the "High Cost of Medical Care" showing that the bulk of medical expense goes for medication (especially patent medicines), nursing and institutional care, and laboratory examinations, but a relatively small proportion to the attending physician. He suggested that the expense of laboratory diagnostic aids be reduced by greater use of the physician's own abilities. An accurate diagnosis can generally be reached after adequate use of the 5 senses and a good history of the illness. He said: "The fundamental object of medical practice is to provide and make available adequate, effective and efficient medical service at all times for every member of the community, regardless of race, color or creed. Medical service as provided today is in a large measure effective and efficient although not always adequate or available. The payment to physicians for medical service is not a large item in the so-called cost of medical care, as only about 50% of patients hospitalized in general hospitals pay a doctor's fee. There is no logical reason for believing that the professional item for adequate and effective medical service can be materially lessened or reduced. On the contrary, there are many reasons for believing that it will be increased. The doctor is a citizen and must discharge all of his obligations of citizenship the same as any other member of the community. The doctor is entitled to a monetary return for his labor that is fair and commensurate with his services, training and experience. The fact that the practice of medicine is a profession does not mean that the doctor shall continue to work under a system that is ethically wrong and economically unsound. The doctor must be paid for his services in order to function as a useful and contributing member of society. These postulates present the background and serve as an introduction to considering what is the economic contribution of physicians to the community. Physicians annually contribute to the community \$365,000,000 worth of free medical service. It is claimed by competent statisticians that physicians treat 1/3 of the population of the United States free of charge. Since at all times 2% of the population is incapacitated and about 4% physically impaired, it follows that from 375,000 to 500,000 persons are daily treated without charge. If only \$2 per person were charged for treatment, the sum total monetary equivalent for contributions annually made by physicians in the form of free medical treatments would be \$365,000,000. If all the medical and quasi-medical foundations were consolidated into one organization their entire contribution to society in dollars during the last 20 years is not equal to the annual donation of the physicians of the country. The medical profession may, therefore, justly claim that under the present medico-social system it stands without a rival in the entire field of medical charity and health philanthropy. This immense philanthropic enterprise is created by the labors and services of 150,000 physicians working for an average remuneration of \$3000 per annum.

The average doctor today is about 28 years of age before he begins practice. What has it cost in actual dollars to produce this educated and trained product? His premedical and medical education will certainly cost, with fees, maintenance and miscellaneous expenses, \$16,000. His loss of



earning capacity while being professionally educated may be estimated roughly for 6 years as \$12,000. This young man then begins practice with an estimated indebtedness of \$28,000 upon which he should pay \$1400 a year as interest. I seriously doubt, although I have no figures to verify it, whether 80% of the doctors ever overcome this primary indebtedness. In other words, more than 4/5 of our profession never repay their capital investment by leaving an estate equal to \$28,000 and never make up the carrying charges by annual savings of approximately \$1400. To just break even the doctor must logically pay this interest and create a capital of \$28,000 before he dies.

That the medical service provided by doctors in the last 30 years has, on the whole, been effective is indicated by a study of the mortality rate in 1900 as compared to the mortality rate in 1925. If the medical service given to the middle class (white collar) had been ineffective or inadequate, then we should expect to find that the people suffered from such service. This is not apparent because the decline in modern mortality is impressive. Mr. Wolman has calculated that, based on the death rate obtaining at the beginning of the century, in 1925 there would have died 1,962,999 persons, but actual deaths were only 1,389,673 persons, a saving of 573,326 lives. With only 43% of the community gainfully employed and 87% of the community receiving less than \$2000 a year, no matter how much the cost of medical service can be reduced, it cannot be brought sufficiently low to allow this large group of the community to pay for medical service within its income.

More is spent on nonessentials than on medical care. The costs of cosmetics, cigarettes, and chewing gum are expenditures that are in no sense necessities and are distinctly in the luxury class. These luxury expenditures total over 5 1/2 times the total cost of all nongovernmental health services. The amount spent for tobacco alone is 3 times as much as that spent for physicians, and the American people spend more for candy than they do for doctors.

There are other economic disabilities that are enforced on the doctors as against the other professions. The establishment of a free clinic by a philanthropist, without the employment of paid physicians, is a most unphilanthropic act. Such an individual is forcing other sick people who are already burdened with debts and whose incomes have stopped, to hire and pay doctors who attend the patients in the free clinic. No free clinic should be permitted to operate without reimbursing the attending physicians for their time. It would be a splendid move in social medical adjustment (1) to curtail the unrestricted system of gratuitous relief, by excluding those not entitled to gratuitous medical advice; (2) to insist on payment of the medical staff engaged both in clinic and out-patient work, and the payment of fees by patients in the pay ward and in the consultation departments of voluntary hospitals. If the doctor could be assured of, let us say, a minimal revenue from all the patients whom he takes care of, he could well afford to permit a reduction on some percentage of his work. But what is attempted, if one may judge from recent newspaper publications, is to oblige the doctor to continue his free medical service and at the same time accept a reduction in his charges to patients whom he takes care of and who are occupying certain types of rooms which are essentially private hospital accommodations.

*Dr. Henry C. Barkhorn*, President of the Essex County Medical Society, presided. He asked the support of the profession for the Society for Relief of Widows and Orphans of Medical Men, an organization making an immediate payment to the members' widows and supplying aid, on request, to any needy widow or orphan of a medical man.

The following new members were elected: Drs. Gordon P. Goodfellow, Aaron H. Horland, Harry A. Lowenstein, Frank W. Senna, and Ernest Tutshulte.

An organization meeting of the county delegates to the state society followed, which lasted to a late hour.

Prior to the meeting, *Dr. Barkhorn* entertained the delegates and alternates at dinner.

Academy of Medicine of Northern New Jersey

Eye, Ear, Nose and Throat Section

E. LeRoy Wood, M.D., Secretary

The meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey held Monday evening, May 11, was planned to celebrate its organization 20 years previously. The founder members and past officers were specially invited to attend. The Chairman, *Dr. J. Wallace Hurff*, presided.

One of the original members, *Dr. Charles W. Buvinger*, read the minutes of the first meeting, enumerating and recalling the founders and giving a verbal sketch of each.

*Dr. Fred Webner*, the first secretary, recalled the early days of the society and traced its progress.

*Dr. Wells P. Eagleton*, President-Elect of the Academy, made helpful recommendations for the conduct of the society during this coming year. He suggested that 2 of the 8 meetings of the year be bedside clinical meetings, and that the meetings be held at different hospitals having instructive clinical material.

This suggestion was favorably commented on and accepted for future consideration and action.

*Dr. Henry C. Barkhorn* recommended that this section of the Academy engage in an organized teaching program for the benefit of its members. He said:

"We must realize that a new group of young men is growing up in our midst. A group of men who have taken post-graduate work, who are better prepared in just those things in which we are weak; a group with a 'show me' attitude, and we must meet our responsibilities. There are innumerable opportunities for teaching. We are all a little weak in anatomy and to someone might well be assigned the task of summarizing each of the special fields for us. In pathology we are even weaker and still the literature is full of pathologic findings and descriptions.

It might be well to have a subsection of just those who are really interested to meet once a month, either here or in successive homes, to summarize the preceding month's literature and new books for criticism and discussion. I am sure I would be glad to join and do my part of the work.

A cadaver could be procured and shown at a meeting to demonstrate operative procedures. The first night could be given to the more massive operations such as mastoids, simple radical and classical labyrinth, followed by *Eagleton's* unlocking of the petrous tip, a cerebellar and subtemporal decompression, a frontal and antrum, with some eye operations such as the *Krönlein* and an visceration of the orbit. The next night, for a smaller group, could be devoted to intranasal

manipulations, lachrymal sac operations and surgery of the neck; and a final, third night, on pig eyes, to a still smaller group for cataract operations, etc. I emphasize the smaller groups because I am sure the crowd would dwindle down. The one thing that is really painful to the average present day doctor, as to the lawyer, business man, and all modern Americans, is *hard work*, and I suggest these things with fear and trepidation because I feel that if in the future as in the past we are to continue to be leaders in ophthalmology, otology, rhinology and laryngology in this vicinity, our work is never finished and we must go on not only developing our own fields but enlarging them, correlating the advances in other fields to ours, making more surveys of the entire body, clarifying our information, appreciating our pathology, learning to apply proper therapy and operative procedures, and crystallizing the facts.

This group should be the clearing house for all these matters. It should sponsor courses such as those by Brunner and Spiegel. When Brunner gave his course the enlarged mailing list of this section was used for prospects. We should, however, tell these teachers exactly what we want and not let them spin their work out interminably with a lot of padding.

We need a didactic night on sinus thrombosis, one on the labyrinth, 1 on the cerebellum and 1 on the petrous tip, but only 1 on each of these subjects, and if properly condensed and tabulated they could easily be put across.

We have been peculiarly fortunate in being the first-born of the sections of the Academy. We have carried on the traditions of the Academy with more success than most of the other sections. We have done more with and by our own men, it seems to me, than any of the other sections, and this is what the Council most desires. I know, for I have been on it for many years. We have been proudest of the accomplishments of our outstanding members and have made special efforts to give them ample opportunities for self-expression and to bring to us that which they have learned. We have cemented old friendships and developed new and firm ones. This section has done much in letting us know others who have similar tastes in medicine and in fostering those friendships which are formed because of the strong personal interest of its members in the advancement of our specialty."

*Dr. Erwin Reissman*, the retiring President of the Academy, recommended that most of the section program be developed from local talent, from our own members.

*Dr. J. Wallace Hurff* then installed the new Chairman, *Dr. Charles W. Buvinger*, and there followed a discussion of the future meetings.

*Dr. Elbert S. Sherman* suggested the utilization of more clinical material, that better facilities be provided for the proper showing of patients, and that the cases be fully listed on the program.

*Dr. George J. Holmes* suggested that an informal "dutch treat" dinner for all interested be held before the meetings and that there be teaching courses.

*Dr. Dennis O'Connor* suggested that the meetings begin earlier and on time.

About 35 were present.

#### The Academy of Medicine of Northern New Jersey

Adrian Ralph Kristeller, D.D.S., Reporter

On April 16, *Dr. Julius Levy*, Director of Child Hygiene of the State Department of Health, was the essayist of the evening at the Academy of

Medicine of Northern New Jersey. He cited the reduction of infant mortality from 112 per 1000 in 1918 to 55 per 1000 in 1930, progress that was due to the advancement of child hygiene, which should not be confused with the medical care of sick children, but is mainly educational and preventive in nature. A child hygiene bureau gives prenatal advice to expectant mothers by nurses, prenatal care and medical examination by physicians in private practice and in clinics, and proper obstetric care. The bureau further supervises infant care through Baby-Keep-Well Stations, where necessary. It advocates immunization of children of pre-school age against smallpox and diphtheria and advises proper diet to insure good teeth. Prevention of blindness at birth, proper care for illegitimate children and their mothers, and elimination of baby farms is also the aim of child hygiene.

The bureau coöperates with other social agencies, and tries to improve sanitation and housing conditions. It discovers and properly cares for cripples and follows up cases of deformities. Two forms of death rate have not decreased in the last 10 years. One is the infant mortality rate for the first month of life, the other, maternal.

*Dr. Levy* concluded by saying that numerous measures were still necessary to aid further development of child hygiene, namely, the more effective control of respiratory disease, premature births and cerebral hemorrhage.

*Dr. Elmer G. Wherry* said that *Dr. Levy*, with the late *Dr. Henry L. Coit*, did much of the pioneer work in child hygiene.

*Dr. Rathgeber*, in turn, honored *Dr. Wherry* as pioneer also in that field.

*Dr. Edward T. Wharton* discussed dental aspects of child hygiene, particularly in relation to the improvement of diet for greater calcium deposits and greater masticatory function.

#### GLoucester County

Henry B. Diverty, M.D., Reporter

The regular monthly meeting of the Gloucester County Medical Society was held May 21, at the Woodbury Country Club. The speaker of the evening was *Dr. D. S. B. Pennock*, of Philadelphia, whose subject was "Has Manipulation a Place in Medicine?"

The following were present: *Drs. I. W. Knight, C. I. Ulmer, R. K. Hollinshed, D. Campbell, H. B. Diverty, O. R. Wood, W. J. Burkett, E. E. Downs, B. A. Livengood, H. Nelson, H. M. Fooder, Church, Ristine, J. H. Underwood, F. G. Wandell, Corson, of Cumberland, and Kline, of Camden.*

The members of the Woman's Auxiliary to the Gloucester County Medical Society were present at the reading of the paper by *Prof. Pennock*.

A luncheon was served after the literary program.

#### HUDSON County

Harry J. Perlberg, M.D., Secretary

The regular meeting of the Hudson County Medical Society was called to order at 9.30 p. m., the president, *J. M. Cassidy*, in the chair. The minutes of the previous meeting were accepted as printed in the Bulletin.

The president reported the Executive Committee meeting of April 27 at the Carteret Club.

*Mr. Byron*, of the Druggists' Association, spoke regarding the trademarking and renaming of well known U. S. P. preparations and formulas by



well known drug houses, which are widely advertised to the physicians for them to prescribe under easily remembered names. The average intelligent citizen now reads all of his prescriptions and then re-prescribes for himself and his friends, the druggist dispensing over the counter.

*Mr. Feinbers*, of the druggists' committee, also spoke, giving the druggists' angle on this matter. There was considerable discussion.

*Dr. Alexander* moved that a committee of 3 be appointed by the president to study and offer concise suggestions regarding the matter, and to confer with a similar committee to be appointed by the Druggists' Association. Carried.

*Dr. Shapiro* spoke regarding preschool examinations and said he was ready to cooperate with the society in determining the proper attitude toward them and the manner in which they should be handled. He said that the County Medical Society recognized the value of preschool examinations but deemed it wise to refer such examinations to family physicians to prevent the overburdening of school examination facilities.

*Dr. Maras* made suggestions regarding the program for the May meeting, and also spoke extensively on the matter of public relations.

*Dr. Waters* moved that a sum, not more than \$500, be appropriated to the Welfare Committee for use in advertising for the benefit of the Hudson County Medical Society.

A conference had been held with the Committee of Druggists in reference to the prescribing of various compounds by physicians. The following resolution had been presented by the Druggists' Association:

*Whereas* it is becoming a rapidly growing practice among pharmaceutical manufacturers to compound various well known formulas and introduce them to the medical profession under proprietary names, and

*Whereas* such preparations contain ingredients of known and definite standards and which are commonly found on all drug store shelves, and

*Whereas* the pharmacist is capable of making these compounds without any difficulty, and

*Whereas* the introduction of these compounds under proprietary titles and in easily identified packages, design or colors, increases the tendency to self-medication, since usually these proprietary names are of such character as to be perfectly legible to the lay public, and

*Whereas* the recommendation of these compounds through prescribing by the medical profession is accepted by the public as an unqualified endorsement for the preparation, and

*Whereas* the cost of these compounds are necessarily far in excess of normal, due to the fact that advertising, detailing and distributing costs must be absorbed, and thus necessarily bring the cost to the patient far in excess of the actual value of the preparation as compared with the cost of the same preparations when compounded by a pharmacist,

*Be It Therefore Resolved* that the Hudson County Retail Druggists' Association, in the interest of a closer cooperation with the physician, pharmacist and patient, deprecates the practice of prescribing, recommending and fostering the use of such compounds under a proprietary title.

The following resolution was presented regarding preschool examinations:

*Preamble.* The large number of children entering the schools each year who have demonstrable physical defects, evidences the need of having all children of preschool age carefully examined, and sufficiently in advance of their entrance to school

so that correctable defects may be treated and the child put in the best physical condition to get the most from his schooling with the least damage to his health. Dr. Haven Emerson recently, in an address before the American College of Physicians, stated that 65% of all children entering school show some physical defect.

The resultant loss of time and delayed educational progress caused by illness due to neglect to correct physical defects amenable to treatment, is unfair to the child, and a great economic waste. Also the school days lost, to correct defects after entrance to school, which could have been treated a few months earlier with added advantage to the child, is an indefensible waste of valuable time.

We believe the physician who has treated the child for the usual illnesses of early childhood is best qualified to make this complete examination and to advise treatment for defects found.

We are desirous of cooperating with the school authorities, medical directors and inspectors of the schools of the county, in every reasonable way, in an endeavor to improve this situation. We feel, however, that it is not the function of school systems, through their medical inspectors, to examine children who are not actually attending school, therefore,

*Resolved* that the Hudson County Medical Society recognizes the need for an increased interest and understanding on the part of parents, of the value of examination of children of preschool age, and wishes to cooperate with the various school authorities and established health agencies of the county in bringing to the attention of the public the necessity for these examinations. But, believing, for the reasons above set forth, that the examination of the child should be cared for by existing agencies, i.e., private physicians and, in the case of those unable to pay, established clinics; and also convinced that it is not the legitimate function of the schools to engage in this medical activity, other than for proper publicity to show its need and value, therefore be it further

*Resolved* that no members of this society, in their capacity as medical directors or inspectors of the school systems of the county, shall engage in the examination of children until they are actually attendants of school, and be it further

*Resolved* that the several Boards of Education of the county, and all members of this society, be apprised by letter, of the action of the society relative to this matter.

It was regularly moved and seconded that this be adopted and the motion was carried.

The Board of Censors reported favorably upon the following applicants: Nicholas M. Alter, and Lawrence V. Lindroth.

*Post-Graduate Committee*, Dr. L. C. Lange, chairman, reported that 36 members had signed up for the course.

*Publicity Committee*, consisting of Drs. Maras, Jaffin and Schwarz, rendered the following report:

(1) To bring before the public any subject pertaining to Medical Science and the Practice of Medicine.

(2) A program of education of the public with the sole purpose of enlightening the public on the results of scientific efforts in the prevention, control and cure of disease.

(3) A program to enlighten the public on the source of knowledge of medical science and upon the methods by which this knowledge is acquired.

(4) Radio broadcasting by authorities in the various branches allied to medical science: Dr. Salmon, Chief of the Division of Health of Jersey

City; Dr. Brinkerhoff, Chief Medical Director of the Public Schools.

(5) Lectures before the Chamber of Commerce, Service Clubs and other organizations of the laity.

Lectures on medical topics by members of this society are offered to any organization or bodies of laity, other than the Civil Courts, which desire them for the purpose of learning or for expert medical opinion, not involved in the Civil Courts or other Bureaus of Litigation. Such lectures and expert opinions to be first submitted to the Executive Board, for censorship, before they are rendered to the ones seeking same.

(6) Lectures in Public Schools, Parochial Schools and High Schools on medical topics such as "Immunization against Diphtheria, etc. We recommend to the authorities that such lectures be presented by the Medical Inspectors in their respective schools.

(7) Showing of moving pictures on diphtheria, in the High Schools.

(8) Distribution of pamphlets to school children, on diphtheria prevention.

(9) Distribution of posters in windows of business stores and other places, of protection against diphtheria.

(10) Printing and distributing to members display cards "Endorsing Immunization Against Diphtheria". Also printing and distributing record sheets, to be filed by the Local Board of Health of each community for permanent record.

(11) Printing of Publicity Committee stationery.

(12) Conducting campaign of immunization against diphtheria, through the public press, news columns and paid advertising, "to make the public diphtheria minded".

(13) Meetings were held at numerous instances, by this committee, together with President Cassidy, to formulate a basis for future working plans in the great field open to the medical profession in this country, whereby a free practice of medicine may be obtained, unhampered by legislation propounded and foisted upon the profession by lay organization.

(14) Communications were sent out to various societies, including the New York Academy of Medicine, the Academy of Medicine of Northern New Jersey and the American Medical Association, informing them of our intentions and requesting their own experiences and ideas on the matter.

At this time it is the extreme pleasure to report a communication from the Hon. Frank Hague, Mayor of Jersey City, through his office and medical staff, on the campaign against diphtheria, with which he is heartily in accord. He also delegated Mr. Salmon, Chief of the Health Division, to represent the interest of Jersey City in this campaign and suggested obtaining all the publicity possible for this campaign, and he will approve whatever is decided upon in the course of this program.

(16) Joint meeting held of the Publicity Committee and the Boards of Health of Hudson County.

Discussion of health measures advocated in our State Legislature, activities of various groups attempting to gain control of and "harness medical profession". Campaign against diphtheria, a health measure threatening us and forced upon us, and by execution of which we will prevent

lay organizations from gaining access to the medical profession and meddling with its affairs.

The statistics on diphtheria having been investigated by Dr. Schwarz, of the Publicity Committee, who will represent same at May meeting of this society, it is shown that the percentage of positive Schick tests before immunization of the large numbers during such campaigns is so small that it does not warrant its execution at such times; and New York City, as well as other large communities of the country, has deferred Schick testing to a period 4 to 6 months after inoculation. It was also shown that toxin-antitoxin is preferred to toxoid.

(17) Attended meeting of Executive Board and discussed abuses by Medical Inspectors of Public Schools in their examination of preschool children in the Public Schools of Union City, without due compensation, thereby initiating the first step of "state medicine".

Publicity Committee was instructed by the Executive Board to conduct the campaign against diphtheria at its own discretion and authorized the Publicity Committee to call upon the members of this society for assistance in writing articles for the public press, and same to be entered as "sponsored by the Hudson County Medical Society".

The Schick test to be stressed at the time of inoculation and arrangements made by physicians to make such test 6 months after inoculation.

Advertise the campaign in the public press.

Report May meeting of the Hudson County Medical Society to the press, instead of inviting members of the press to attend that meeting.

Publish the list of members of the Hudson County Medical Society in the public press.

Appropriation of \$500 was made to be used by the Publicity Committee in its present activities.

(18) On April 29 attended the Councilor District Meeting at Hackensack. For delegates to the State Convention, from Hudson, Passaic, Sussex and Bergen Counties.

(19) Held Joint Meeting of the Boards of Health of the various communities of Hudson County and the Publicity Committee, to make final arrangements for the campaign of immunization against diphtheria.

There has been no representative nor communication received in answer to requests to join this campaign from the following communities: West New York, East Newark, Harrison, Secaucus and Guttenberg.

The campaign is being conducted in Union City, which is partly administering to 7 communities: Weehawken, Kearny, North Bergen, Hoboken. Bayonne campaign is postponed to May 12, after election.

The following letter from Mayor Hague to the Publicity Committee was read: "The campaign to immunize against diphtheria which your society is about to inaugurate in Hudson County, and particularly in Jersey City, has my hearty approval and endorsement. A similar campaign carried on by our health department about 2 years ago achieved very satisfactory results, although it was the first one attempted here and it is only fair to suppose that with your carefully organized program and the experience we had in the former campaign, that your efforts will be more completely effective, and productive of more complete and informing results.



Every city department concerned will gladly cooperate with your body in making the movement successful. The Health Bureau will furnish the necessary serum free to physicians, and the Board of Education will aid you in any reasonable way in the school part of the work. The city physicians and nurses in the public and parochial school will also do their part cheerfully.

Wishing you every success in the campaign, I am,

Very truly yours,

Frank Hague, Mayor.

The following nominations were made from the floor for members of the Nominating Committee to serve in 1932, and all were elected: Drs. Pollak, Cosgrove, Klaus, Maras, Chapman, Alexander, M. Shapiro, B. T. D. Schwarz, Binder and Jaffin.

Dr. B. Maras nominated Dr. B. T. D. Schwarz and Dr. Leonard Fauquier as members of the Publication Committee, and they were duly elected.

Drs. Nicholas M. Alter, 85 Van Reyden Street, Jersey City, and Lawrence V. Lindroth, 4633 Hudson Boulevard, North Bergen, were declared elected to membership.

The president announced that there would be a meeting of Delegates and Alternates to the State Society on Monday, May 25, at 9 p. m., at the Carteret Club.

Dr. J. B. Morrison, the State Society Secretary, made a few brief remarks. He stated, among other things, that the Welfare Committee of the State Society had been extremely energetic; that no Bill inimical to the profession had passed the legislature this year. He spoke in reference to the Post-Graduate Courses and stated that he expected next year to have money appropriated so that the courses would be given all over the state for a nominal fee of \$10.

In reference to the bill concerning the discussion of specialties, he felt that this matter should be kept out of politics and within the State Society, that they should be empowered to certify to the qualifications of various specialists.

He advised the Publicity Committee to get in touch with the Parent-Teacher Associations and get a list of children who are going to enter schools. He asked that the report of the publicity committee submitted at this time be sent to him and a condensed report to the secretary of each county society.

The president appointed the following committee to confer with druggists: Drs. Alexander, Chairman; J. Koppel, and S. G. Scott.

Dr. Joseph Schapiro moved that a committee be appointed to confer with the Medical Directors of schools of the various municipalities of Hudson County, so that some concrete action could be formulated in accordance with the resolution adopted at this meeting.

The secretary moved that he be authorized to print and distribute the new constitutions to the members of the county society; carried.

Dr. Alexander moved that the recommendation of the Executive Committee appropriating \$500 for the Publicity Committee be approved by the society. The motion was seconded and carried.

The president asked that every man keep a record of the children he immunizes so that the names can be sent to the Chairman of the Publicity Committee, or the county society secretary.

#### PAPERS OF THE EVENING

Dr. A. E. Jaffin read a paper on "The Rôle of the Practicing Physician in Public Health Affairs". As good citizens and by virtue of professional training, we are especially qualified to give advice in public health affairs. It is the duty of every physician to thoroughly enlighten the public regarding false cures, quacks, cults, etc. The public interest should be stimulated in *good medicine* as it always has been in travel, history, music or other sciences. They should be made familiar with the methods of prevention of contagious diseases so that in civil life typhoid and small-pox can be eliminated as thoroughly as has been done in the army. The same, of course, now holds true of diphtheria.

With regard to the periodic health examination, while it may not be wise to stress it too much, for fear of criticism directed toward the financial advantage of the same to the physician, nevertheless the importance and value of such examinations should always be emphasized and the plan encouraged by every physician. Too often the doctor is disinclined to make this examination just because the applicant does not happen to be ill.

The early diagnosis of tuberculosis may properly be considered in this connection. The physician's duty is not ended with the diagnosis of an individual case until all the other individuals exposed to this patient have also been properly and carefully checked. It is much to be regretted that many physicians, after making the diagnosis of tuberculosis, still send the patient off on his own to lead an undisciplined life for a longer or shorter time, permitting the patient to lose the benefit of proper methods of curing.

The practice of teaching rational living rather than seeking remedies for the effects of irrational living cannot be too strongly emphasized. Every doctor would then make of himself a health officer in private as well as in public practice. He will at the same time help maintain the fundamental intimate relationship that should exist between doctor and patient. A faithful adherence to these duties will, more than anything else, eliminate the gradually increasing economic problem facing the general practitioner.

Altogether these efforts will constitute good medicine, good practice, and good public service.

Other papers presented were: Symposium—"Tuberculosis in Children": (1) "History, Symptoms, Pathology" by Dr. Walter Gonzales, Hoboken. (2) "X-ray Diagnosis and Interpretation", by Dr. Benjamin Joseph. (3) "Tuberculin-Reaction; Technic and Interpretation", by Dr. Harold Tidwell. (4) "Treatment and Prognosis", by Dr. Edward Lupin.

#### Short History of Diphtheria Eradication

Berthold T. D. Schwarz, M. D.,

Member Publicity Committee Hudson County Medical Society, Jersey City

Diphtheria, the scourge of childhood, is fast disappearing. Near the close of the last century, there were more than 150 deaths from diphtheria per 100,000 population. In 1930 the rate has dropped to less than 4 per 100,000, truly a remarkable reflection on the efforts of preventive medicine. The death rate from diphtheria in the nation, in the brief space of 3 years, has been practically cut in half. The death rate has been reduced more

than 1/3 in 1930 over that of 1929. Since 1911 it has diminished more than 80%.

Diphtheria is a very old disease. Writings of it can be found in the Babylonian Talmud. Aretaeus described the disease in the first century. Diphtheria swept over the civilized world, in the form of great throat pestilences in the middle ages, particularly in Spain, and continues throughout all countries to the present day.

While diphtheria usually attacks those under 6 years of age, it has also caused death to men famous in world history. Diphtheria caused the death of George Washington. It is highly infective and is transmitted from one person to another. The boy King of Roumania is reported as having the disease and his mother, Princess Heléne, is reported to have contracted the disease while nursing her royal son.

Until the cause of diphtheria was discovered by Klebs, in 1883, and isolated 1 year later by Loeffler, the medical profession was very seriously handicapped in fighting this deadly disease. Ignorance is deadly. The early attempts to control diphtheria were directed toward the isolation of those affected by the disease and disease carriers. Because of its marked prevalence in those days, it was rather heart-breaking on the part of Boards of Health in the last century to cope with this problem of diphtheria prevention. Cultures were taken of the nose and throat of suspected individuals but since there were also many individuals who were not sick, yet carried the germ and incidentally transmitted it to others who were susceptible, the efforts directed toward its control seemed to be all in vain. It was apparent that in order to successfully control the disease at that time, it would be necessary to isolate almost the entire population; an impractical solution.

Fortunately, not long after, the toxin evolved by the diphtheria germ was discovered, especially by the works of Roux and Yersin. The discovery of the poisonous element of this disease led to further research. Von Behring found the means by which the poisonous substance could be neutralized. This serum was called "antitoxin". How efficacious diphtheria antitoxin is in the treatment of diphtheria, and the immunization of those already exposed to the disease, is graphically indicated in the remarkable decline of about 82% in the death rate. It does not take much to visualize the very great saving in lives, or the amount of anguish and financial loss, which illness or death causes. The use of antitoxin has resulted in the saving of about 10,000 lives each year! Little wonder that infant and childhood mortality has diminished.

Although many would say that the advance of diphtheria prevention has reached its highest peak with the use of antitoxin, it is characteristic of men of science to ever probe deeper for more effective control of disease. The incidence of diphtheria, despite antitoxin, was still too great. Well over 15,000 children still died of this disease yearly in the United States. To alert minds it demonstrated the fact that a surer preventive must be found before this dreadful disease could be conquered.

The serum which specifically combats the poison of diphtheria is mostly obtained from horses, which are inoculated with the diphtheria toxin. When toxin is administered in sublethal amounts it

evokes a reaction on the part of the horse to neutralize it. So provident is nature in elaborating a defense that its neutralization efforts result in a considerable excess of antitoxin which may be separated from the horse serum and purified for use in treating diphtheria. It was found that when mixtures of diphtheria toxin with antitoxin were administered, the horse did not become as sick, and still produced a very fine antitoxin. Dr. Theobald Smith suggested that this method of mild reaction, using diphtheria toxin-antitoxin in horses, be used in immunizing human beings against diphtheria.

Dr. Schick, in 1913, found that by injecting a very minute amount of the toxin-antitoxin into a superficial layer of the skin it could be determined whether or not the person tested was immune or susceptible to diphtheria. It was subsequently found that individuals of different ages had a varying susceptibility to diphtheria. Dr. Park and his associates in testing thousands of individuals with the Schick Test determined that the susceptibility at different ages ranged as follows:

AGE	SUSCEPTIBILITY
Under 3 months	15%
3 months to 6 months	30%
6 months to 1 year	50%
1 year to 2 years	60%
2 years to 3 years	60%
3 years to 5 years	60%
5 years to 10 years	30%
10 years to 20 years	20%
Over 20 years	15%

It is easily seen that the largest incidence of the disease and death occurs between the ages of 3 and 5 years, the preschool age.

Diphtheria can be successfully controlled only by the administration of toxin-antitoxin or toxoid because individuals transmit the infection to others frequently without realizing that they are subjects of diphtheria. It may manifest itself merely as a slight nasal catarrh, mild tonsillitis, or running ear, or it may be transmitted by diphtheria bacillus carriers. Long after recovery from diphtheria the germs may linger in the throat. As a rule, a person is considered free from diphtheria if he shows 4 successive negative throat cultures. Most cases are not infectious after a period of about 5 weeks. In some, however, the infection exists for several months. The diphtheria toxin cripples the heart and damages the nervous system. Antitoxin neutralizes the toxin and prevents damage. Besides being curative, when used, it gives a temporary immunity of about 6 weeks' duration. This immunity conferred by antitoxin is called *passive*. When toxin-antitoxin is given it creates an *active* immunity; that is, the individual elaborates his own antitoxin. So far as is known, the duration of this *active* immunity is lifetime.

Diphtheria immunization by toxin-antitoxin began to be employed on a large scale after 1920. In 1920 over 15,000 school children died of diphtheria! In 1930, thanks to the effects of toxin-antitoxin administration, the number of children in the United States who died is well below 5000.

Since this is the occasion of inauguration of a "diphtheria eradication campaign", conducted by the Hudson County Medical Society, we can scan with interest the United States Public Health Service reports for the year 1929, the last available year, which shows the incidence of diphtheria



in the various communities of Hudson County, to be as follows: Jersey City, 537 cases; Bayonne, 168; Harrison, 18; Hoboken, 57; Kearny, 10; Union City, 51; West New York, 43. Data for the other communities is not available at this time, but it is certain that the reported incidence of diphtheria in Hudson County for the year 1929 indicated well over 1000 cases. The entire state of New Jersey reported 5361 cases. The death rate of diphtheria in Hudson County was approximately 10% of the cases reported. The presence of diphtheria in any community is an insult to the intelligence of that community.

While there are numerous cities that have amply demonstrated the efficacy of diphtheria campaigns in the past, it may suffice to know the findings of an investigation conducted by the Metropolitan Life Insurance Company, which found that during the years 1926 to 1929, where campaigns were instituted against diphtheria in 53 cities, the diphtheria mortality diminished 33%. In 31 cities where no campaigns were made, there was a 9% increase in diphtheria. A classic example of what diphtheria immunization can do is illustrated in the town of Auburn, N. Y. In the year 1922, toxin-antitoxin was administered to 58% of the school children and in that year no case of authentic diphtheria developed in that group. Among the 42% that were not immunized, there were 80 cases of diphtheria reported and 13 deaths occurred. In 1923, 73% of the school children were immunized, and no authentic cases of diphtheria were reported, while among the 27% not immunized there were 15 cases of diphtheria reported and 1 death. In 1924, 85% of the school population was immunized and among these children, no case of diphtheria occurred; among the 15% not yet immunized, there occurred 3 cases among the school children and 3 cases in the preschool age. In the year 1925 no case of diphtheria was reported. In the years prior to immunization there was an average of 104 cases of diphtheria and 14 deaths occurring therefrom, reported yearly. This is also the story of San Joaquin, California, and Grand Rapids, Michigan, and other cities. For every day of the year 1930 there were 22 people who died from diphtheria.

Surely by means at disposal of the medical profession, and with the aid of an aroused, intelligent public, diphtheria can be vanquished.

Clinical Society of North Hudson Hospital

J. Africano, M.D., Reporter

The regular monthly meeting of the Clinical Society was held Tuesday, May 12, with Dr. B. Kooperman acting as Chairman, and 55 members and guests present.

Dr. Tannert read the hospital report for April: 224 admissions, 227 discharges; 20 deaths, of which 7 were medical, 6 surgical and 4 new-born.

Dr. W. Braunstein briefly discussed the 7 autopsies (35% of the deaths) performed during the month.

CASE REPORTS

Dr. E. Bailyn. "Empyema and Generalized Tuberculosis in Infant of 7 Months." J. P., white infant, 7 months old, admitted on February 20, with history of chronic productive cough, dyspnea, cyanosis and generalized eczematous rash over

face and body. No evidence of tuberculosis in family. The infant was a full-term baby, normal delivery and bottle-fed, developing normally until 4 months old, when a cough started and gradually became productive and spasmodic in character; so severe at times as to cause cyanosis. There was no history of convulsions or vomiting and no fever was observed. In that same period a scaly rash appeared about the head and face; also a mass in the upper right femoral region. Examination of chest revealed decreased expansion of the left side, which was flat on percussion, with markedly diminished voice and breath sounds. Abdomen negative. In the right femoral region a large gland, the size of a walnut, could be felt. Diagnosis of left-sided empyema was verified by a roentgenogram. Thoracotomy was done and about 4 oz. purulent material was evacuated, which on culture proved to be full of pneumococci. There followed a very stormy, postoperative course. In spite of good drainage, there were remissions and exacerbations and practically no improvement in the spasmodic cough, which now became very brassy and could be heard all over the ward. The temperature became septic in type and the child expired on March 12.

Autopsy findings: (1) A cluster of very much enlarged nodes, partially overlapping and surrounding the pericardium, trachea and bronchi, which on section presented areas of caseation. (2) The pleural cavity contained a moderate amount of fibrinopurulent exudate, and lungs were diffusely infiltrated with small whitish nodules. (3) Abdomen contained no excess of fluid. Liver was of normal size, but greatly congested, and spleen had a few scattered, minute, whitish spots suggestive of tuberculosis.

The important points in this case are (1) its comparative rareness in children under 1 yr. old; (2) the complication of empyema following the original pneumonia which activated the latent t.b. focus in the glands; (3) the characteristic chronic cough which sounded very much like a whooping-cough of 3 months' duration, and could be explained as a stridor caused by pressure of the enlarged tracheobronchial glands; (4) the extremely poor prognosis in generalized tuberculosis in young infants.

Dr. Stein. "Meningococcus Meningitis Treated by Cisternal Puncture." M. S., white, male infant, aged 5½ months, admitted on April 16, with history of vomiting, fever and anorexia for 2 days. Anterior fontanelle bulging; eyes staring; pupils equal and reacting normally; neck showed marked rigidity; knee-jerks exaggerated; Babinski positive; Kernig's sign present; temp. 103°; pulse 156, respirations 28. Spinal tap yielded about 7 c.c. turbid fluid under slight pressure. Cell count 21,300. Smear and culture positive for meningococci. Blood count: R. B. C., 3,284,000; Hb., 65%; W. B. C., 8100; polys, 42%.

On April 17, spinal tap yielded only 1 c.c. turbid fluid, but cisternal puncture brought 25 c.c. turbid fluid under high pressure. During the following 3 weeks cisternal puncture was performed about 20 times; on 7 occasions, antimeningococcic serum was given by the cisternal route. After the first week there was definite improvement, but then the child had projectile vomiting, became stuporous, finally comatose, and died on May 12.

The spinal canal was blocked practically throughout the entire course of the disease; at times during the later stages of the disease there was also blocking of the cistern. There was no very mark-

ed benefit that could be attributed to the serum. Apparently, there was much more relief obtained by drainage through cisternal puncture.

The pathology in this case was probably extensive, involving the base of the brain. Judging from the block in the spinal canal and the xanthochromic nature of the cerebrospinal fluid, there was hemorrhage and an extensive plastic exudate involving the base of the brain and spinal canal. Probably there was no block in the ventricles, because the bulging fontanelle would always become soft after cisternal drainage. The pathologic state of the subarachnoid space at the base of the brain prevented absorption of the cerebrospinal fluid and caused increased intracranial pressure, as was evident by the bulging tense fontanelle which had to be relieved by frequent cisternal puncture.

*Dr. Luippold.* "Hypertrophic Cirrhosis of the Liver." The following 2 cases occurring in our wards in rapid sequence will serve to illustrate how difficult it is at times to make diagnosis of liver disease. A R., male, aged 67, was admitted March 3, complaining of weakness, fatigue, shortness of breath and nervousness. Previous history: typhoid at 27; "rheumatism" 10 yr. ago; drank beer moderately for many years, occasionally a little whiskey. About 1 month ago had, according to his description, a definite attack of grippé. Since then, he had felt weak, with a decided dyspnea upon exertion; so much that it was difficult to climb even a flight of stairs. He also noticed a marked nervousness, and at times a marked tremor all over the body. Excessive sweating upon the slightest mental or physical strain was another feature.

Physical examination: Well developed and well nourished, with sallow complexion, and depressed, anxious facies; coarse tremors of both hands; sclera slightly icteric; tongue coated, also with coarse tremor; teeth in poor condition; heart sounds weak but of regular rhythm, with systolic murmur at apex. The liver margin was palpable below level of umbilicus and could be made out extending away over and under left costal margin, with a smooth surface throughout, only slight tenderness upon deep palpation, and no pulsations perceptible. The spleen appeared moderately enlarged. No evidence of ascites, nor edema of extremities; abdomen moderately tympanic.

Blood count showed a mild secondary anemia. Wassermann and blood chemistry negative. Icteric indices from 34-50. Stool on gross appearance fairly normal, but biochemically strongly positive for blood. Van den Bergh test gave immediate direct reaction. Urinalyses negative.

About March 19 the presence of fluid in the abdomen became evident, and an icteric tint to the skin and conjunctiva more apparent. Patient more somnolent. Paracentesis abdominalis was performed March 29, when only a few ounces of fluid were obtainable, but on April 4, 52 oz. were removed. After this he seemed a bit better for a day or two, but then gradually lapsed into an irrational, stuporous, involuntary state and finally into coma; coincident with this he developed a hypostatic pneumonia and died April 12.

While at first liver congestion secondary to a heart lesion was suspected, it soon became apparent, especially after the ascites developed, that the condition was more probably a portal cirrhosis, but a diagnosis of malignancy could never be entirely ruled out.

Autopsy revealed an enormously enlarged liver occupying the greater part of the abdominal cavity; weight estimated at 10 lb. There were very strong bands of surrounding adhesions. The organ was

brownish-green in color and uniformly granular, with smooth surface, firm consistency and cutting with resistance. Section showed a diffuse fibrosis with bands of connective tissue running through and about the bile-ducts, and polygonal cells distorted and degenerated, i.e., as in a typical portal cirrhosis. The lungs showed a congestive and terminal pneumonia; the aorta an atheroma; spleen was moderately enlarged from congestion and fibrosis; and the kidneys showed parenchymatous degeneration.

C. L., male, aged 75, entered the hospital April 10, complaining of chills, fever and a jaundice for the past 2 or 3 weeks, with dizziness, anorexia, vomiting and constipation. Typhoid at 25; moderate beer drinker throughout his entire adult life.

Apparently in continuous good health until 3 weeks ago when, while at work as a watchman, he was suddenly seized with chills and fever. The fever continued but at times seemed more pronounced, and the chills also recurred at irregular intervals. During the first 2 days had marked attacks of vomiting. Jaundice was first noticeable 2 weeks ago and this gradually increased. Skin and sclera markedly jaundiced. Drowsiness was very pronounced, but he could be aroused with little difficulty and gave evidence of an average intellect and memory. Teeth very bad and tongue heavily coated. Heart sounds regular; bradycardia; poor quality. Liver very much enlarged and extended to 4 finger breadths below the costal margin. Blood count: Hb., 69%; R. B. C., 3,550,000; W. B. C., 19,000; polys., 78%; lymphs, 22%; coagulation 1-3½ min. Urine showed small amount of indican, much bile and urobilinogen in dilutions to 1:200; feces chalky and negative for blood.

The somnolence became steadily deeper and the jaundice more intense. The fever which had fluctuated from 100-103° from the third to the ninth day, gradually subsided to normal as the patient slid into practically a coma the last 3 days before he died on April 26.

Comments: The acute onset of symptoms made the diagnosis of an acute hepatic infection probable. The larger liver was believed to be a latent cirrhosis, which, suddenly activated by this complicating, acute infection, disturbed the hepatic compensation and rapid degenerative changes set in even before marked ascites or hemorrhages could have occurred. The jaundice was believed to have been of toxic origin and also obstructive, by occluded, swollen biliary ducts. On the other hand, the advanced age of the patient, the enlarged liver that had even the suggestion of masses in its contour (to some of us), and the jaundice, remembering that it has been repeatedly demonstrated that the jaundice of malignant disease may be ushered in by an accompanying acute gastrointestinal upset, all made the diagnosis of malignancy likely.

Autopsy disclosed a very large liver weighing about 10 lb. Color was dark greenish-brown; surface, smooth; cut surface, granular with exudation of greenish material; bile-ducts, markedly dilated; gall-bladder distended and filled with a watery fluid (hydrops). Microscopic section of liver showed a fibrosis about the bile-ducts, with edema and dense collections of polys, thus featuring an acute, suppurative cholangitis with congestion, and an early biliary cirrhosis, probably secondary. Spleen was slightly enlarged and congested; the kidneys were polycystic with amyloid degeneration; and the pancreas showed fibrosis and congestion.

*Dr. S. Braunstein.* "Perinephritic Abscess." A woman, aged 48, admitted April 5, with complaint of pain in the left hypochondrium and weakness.



Typhoid at age of 2; hemorrhoidectomy at 16; all teeth were extracted at age of 29. Has always been constipated and troubled with gas. Had a cough about 4 weeks ago lasting 10 days; no expectoration. Has lost 29 lb. No urinary symptoms.

Onset dates back to January, when she had chills and fever; she believed grippe. Following this, she developed an otitis media which ruptured and discharged for several days. A few weeks later she had a nonproductive cough lasting 10 days, so severe that it left her with a terrific pain in the left abdomen; pain not controllable with opiates.

On April 1 the patient was seen at home; she showed evidence of marked weight loss but examination was negative except for the abdomen, which was soft; no rigidity, but there was marked tenderness in the left upper and lower quadrants and a large mass could be felt, hard and extending from the xiphoid process to the left anterior iliac spine. Urine showed a trace of sugar and no albumin. Medical consultation was held 2 days later and it was decided that the mass was a large spleen due to infection, splenomegaly or thrombosis in the splenic vein.

In the hospital, blood showed: Hb., 68%; R. B. C., 4,100,000; W. B. C., 12,000; polys., 80%; lymphs., 20%. Urine: 0.5% sugar, acetone and diacetic acid. Temperature ranging from 100-103°. The patient then felt better, temperature dropped, and the mass became smaller; but 11 days after admission the temperature rose again and she complained of severe pain in the region of the left kidney. Examination showed a large fluctuating mass in region of the left kidney. Dr. Klaus examined her on the next day and felt sure that we were dealing with a perinephritic abscess. She was operated upon that same afternoon and a large quantity of foul smelling pus was evacuated through an incision over the left kidney region.

Following operation, the temperature dropped; she was free from pain and the mass in the left abdomen began to disappear. She was discharged May 2, and with a diabetic diet and liver extract is making a rapid recovery.

Dr. Klaus believed this to have been a primary perinephritic abscess, in contradistinction to one secondary to renal infection; he cautioned against depending upon the urinary findings to assist in making the diagnosis; tenderness is the best sign of deep-seated infection, as shown by the following case which is similar to the one presented: a boy who suffered with a "cold", and extreme tenderness in one of the loins—no abscess could be palpated, as it was walled-off—there were no signs in the urine, yet on operation a profuse amount of pus had formed around the kidney, and the patient was cured.

Dr. Lange suggested use of x-rays to diagnose spleen from kidney, after injection of the rectum with air; also, the feel of the spleen is softer and more pliable than the kidney.

Dr. Luippold called attention to the low white and low poly counts; with such a large amount of pus under pressure a higher count would have been expected.

Dr. D'Acerno suggested cystoscopy, and the P. S. P. test as an aid in arriving at diagnosis.

Dr. Pearlstein summarized the sequence of events as: ear abscess; hematogenous infection; renal (cortex) infection, which healed and broke into the capsule; then generalized infection, which accounted for the splenitis; finally, infection of the perinephritic space.

Dr. Hekimian described the relations of a perinephritic abscess: there are 2 layers of fascia en-

veloping the kidney, one adherent to the organ and the other paranephritic, between which there is a large amount of fat having its own independent renal vessel; thus is explainable how a carbuncle, or an otitis, tonsillitis, etc., will lead to a perinephritic abscess without involvement of the kidney itself; also via the lymphatics, this abscess may be consequent to adnexal disease, or to chronic recurrent appendix. In diagnosing by means of x-rays one should look for deviation of the border of the psoas muscle of the affected side.

Dr. Bender. "Acute Osteomyelitis of Femur in Infant." R. R., aged 7 months, white, born in this hospital, instrumental delivery. Patient was admitted March 23 with diagnosis of osteomyelitis of the left femur. Breast fed for 2 months, then bottle fed. Bronchitis at 2 months. Pertussis at 4, which was cured within a month under vaccine therapy.

Present illness began March 4, with fever, vomiting, constipation, cough and sweats. Signs of consolidation over the right lower lobe, with dullness, bronchial breathing and fine crepitant râles. Next day the signs on the right side increased, and the pneumonic process spread to the left lower lobe. The following day the process had involved the greater part of both lungs. Temperature at onset 103°, ranged between 104-105° until March 8, when it dropped within a period of 3 hr. to subnormal, and the infant collapsed. Rallied under adrenalin and camphor stimulation.

After 2 days of normal temperature, it rose to 101° and examination showed râles over the entire chest. The ears showed bilateral myringitis, which on puncture discharged profusely. March 18 it was noticed that the baby assumed a peculiar attitude; left leg drawn up and slightly abducted. On motion the child would cry pitifully. Radiogram of the hip confirmed the suspicion of osteomyelitis and showed destruction of the upper part of the femur shaft. Chest picture at the same time showed fibrosis and effusion in the lower right chest and extensive pneumonia of the left lung.

Under regional anesthesia, an incision about 3 in. long was made over the left trochanter; hip joint exposed, opened and a large amount of thick pus was aspirated; no loose or roughened bone. Owing to the poor condition of the patient, no other procedure was taken and the wound was packed with 3 gauze drains and a rubber tube inserted. After the operation the temperature began to rise rapidly and reached 107.6° at 7 p. m., when the patient died. Exploratory puncture before the operation failed to obtain any pus from the pleural cavity. Culture of the pus from the femur revealed the pneumococcus.

Dr. Klaus. "Jejunal Ulcer Following Pylorectomy for Duodenal Ulcer." G. D., male, aged 29, admitted April 1 with a postoperative jejunal ulcer. One year previously, he had been operated upon for a large penetrating ulcer of the first portion of the duodenum of 5 years' duration. A pylorectomy was done, which included both the ulcer and acid-bearing area of the stomach; the resection was completed by a posterior Polya anastomosis; appendix also removed. The patient made an uneventful and rapid recovery and 2 weeks after operation was discharged as cured. Upon discharge he was entirely free of symptoms, but was advised to remain on a special selected diet.

He was readmitted 6 months later with history of having been perfectly well for months, when he began to have cramp-like pains in the upper abdomen, and particularly in the vicinity of the old operative scar. At no time was there any

vomiting. The pains began shortly after eating and continued for 1-2 hr. Gastric analysis showed total acidity of 85; free HCl 40; combined 56; no blood. X-ray examination showed nothing conclusive. A diagnosis of postoperative marginal ulcer was made, and after 5 days of rest and diet he requested to be discharged, feeling greatly improved and practically free from abdominal pain. He was back to the hospital in 5 months with history that he had remained free of pain for 3 weeks after his last discharge but that the pains returned much more severe, and have become practically constant. Food has no relation to the pain, nor does it relieve it; never any vomiting.

A diagnosis of marginal ulcer was made by the Medical Service. The usual ulcer treatment was thoroughly tried for 2½ weeks with no improvement, and an exploratory laparotomy was done. A large indurated ulcer 1x1½ in. was found in the jejunum on the spur between the 2 loops of jejunum as they joined the anastomosis with the stomach, the ulcer being situated directly opposite the stoma. It seems fair to assume that the ulcer formed at this point by the direct flow of gastric contents pouring out into the jejunum. There was much induration in the mesentery immediately beneath the ulcer. The old anastomosis was taken down, and the ulcer, together with about 5 in. of jejunum and a portion of the stomach, were resected. A new anastomosis was then constructed by suturing the stomach to the distal loop of jejunum by end-to-end suture and then suturing the proximal or short loop of the jejunum end-to-side anastomosis to the jejunum below the new stoma, this procedure constituting a Y-shaped method on the Roux principle.

He was discharged again, free of any gastric symptoms, about 2½ weeks after operation.

This case was presented because the complication of postoperative jejunal ulcer is frequently seen following any operation for the cure of gastric or duodenal ulcer. It is most commonly seen following the simple gastro-enterostomy. Pylorectomy, with excision of the acid-bearing area of the stomach, has been in recent years especially advocated to prevent just such a complication. Many surgeons claim that jejunal ulcers will not occur after this procedure, but that such is not the case has been proved by numerous other such cases in the literature.

*Dr. Klaus.* "Benign Pancreatic Tumor Complicated by Subacute Pancreatitis." G. S., female, aged 26, married, admitted to the Surgical Service April 3, with a sudden, severe abdominal pain of 24 hr. duration. The pain was intense and localized to the epigastrium and right upper quadrant; of a continuous character with radiation to the back, as in gall-bladder disease. Vomiting had been continuous since the onset and bowels had moved effectually only with enemas. During the past 3 years patient had at least 5 similar attacks, but of less severity. She was operated upon 2½ years previously for what appeared at that time a gall-bladder disease, but she was told that a tumor was found under the liver and that the gall-bladder was not removed. She does not know what the surgeon did at the time, but following the operation she remained fairly well for several months. We were unable to get any information from the hospital where that operation had been done. Temp., on admission, 101°; pulse, 88; W. B. C., 17,800; polys., 94%. Abdomen showed an old scar in the right upper quadrant, slight distention, considerable tenderness and rigidity over the entire epigastrium and right upper quadrant. No masses could be felt. The urine showed a slight amount

of albumin and 0.2% sugar, which is of much significance in light of the operative findings later.

From the history and physical findings a diagnosis of acute cholecystitis was made, and partial intestinal obstruction was seriously considered, as well as a perforated duodenal ulcer, yet there was sufficient evidence to rule both these out. Acute pancreatitis was not considered.

A considerable amount of slightly blood-stained fluid was found throughout the abdominal cavity; entire upper abdomen was a mass of extensive adhesions to the old scar and the loops of intestines; gall-bladder was completely obscured by the adherent bowel; stomach likewise adherent to surrounding viscera. After separating all these adhesions, the gall-bladder was found slightly thickened but otherwise normal; it contained no stones; fat necrosis of the omentum in the upper abdomen was noted. After separation of the extensive adhesions, it was found that at the previous operation an anterior gastro-enterostomy had been done. After further investigation, a large, hard, nodular mass, the size of an orange, was found in the region of the head of the pancreas. It is fair to assume from the history that this tumor was found at the first operation 2½ yrs. ago, but why the gastro-enterostomy was done is hard to explain unless it was thought that the tumor was causing an obstruction to the stomach, or possibly might do so later. The long duration of the pathology certainly excluded any malignancy and it seems reasonable to assume that one is dealing here with a benign tumor of the pancreas that has not grown rapidly, or more likely a chronic pancreatitis with a superimposed acute attack of pancreatitis as definitely shown by the blood-stained abdominal fluid, fat necrosis, and the symptoms of severe abdominal pain, vomiting, temperature and leukocytosis. Her past attacks of abdominal pain were no doubt due to attacks of pancreatitis.

The urine before operation showed sugar and this continued for 1 week following operation and then cleared up without any special treatment, which shows we were dealing with a pancreatic disturbance and that should have been considered more carefully before operation in localizing the lesion to the pancreas.

A cholecystostomy was done for the purpose of draining not only the biliary ducts and liver but likewise the infectious process of the pancreas. The patient has made an uneventful convalescence and has been discharged free of any symptoms and in excellent condition after 4 weeks of drainage.

The case is presented as a most unusual one of subacute pancreatitis in the presence of a large mass in the pancreas which is either a benign tumor or a chronic pancreatitis, in which the differentiation at the time of operation could not be made, but which most likely, from the history and long duration, is a chronic infection of the pancreas.

#### MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Medical Society met in the Lecture Room of the Nurses' Home, St. Francis Hospital, May 13, with Dr. Swern presiding.

We had the inestimable privilege through the efforts of our Treasurer, Dr. North, of hearing an address by Dr. Chevalier Jackson, the premier on bronchoscopy and esophagoscopy. A capacity audience listened to Dr. Jackson while he described



in a most interesting manner "Bronchoscopic Observation on Diagnosis and Treatment in Suppurative Diseases of the Lung". Dr. Jackson illustrated with lantern slides, chalk, and moving pictures the many conditions arising within the pleural cavity as the result of obstructed breathing, and a rising vote of appreciation was tendered the distinguished speaker.

Drs. Elmer J. Elias, J. L. Wikoff, A. J. Lattiere, of Trenton, and J. C. Hiden, of Princeton, were elected Active Members; and Dr. Gerold H. Miller, Cranbury, as an Associate Member. The application of Dr. A. James Fessler was read and took the usual course.

The President appointed Drs. Reddan, Douress and Yaeger as a committee to draw resolutions on the death of Dr. Walter Madden.

Committee appointed to consider the death of Drs. Craythorn, Selbert and Stratton submitted resolutions which were read and adopted. (See Obituary Section.)

A communication from the Trenton College Club, with reference to the request of Dr. Joseph Colt Bloodgood, of Johns Hopkins Medical School, for opinions of certain statements to be presented to the Board of Trustees of the American Society for the Control of Cancer, was read and referred to the Public Relations Committee.

A communication from Dr. James A. Fisher, relative to the Golf Tournament, was read and due notice taken thereof.

Dr. Sica, Chairman of the Committee on Contract Practice, made a verbal report, with detailed account of the various opinions, statistics and schedules of fees received by the Committee as the result of a questionnaire.

The motion carried that the next meeting of the society will be held at the Hopewell Valley Golf Club, in the afternoon of June 18.

## MIDDLESEX COUNTY

### Medical Section of Rutgers Club

John H. Rowland, M.D., Secretary

The medical group of New Brunswick was entertained by Dr. F. C. Johnson, Chairman of the Medical Section of the Rutgers Club, at a beef-steak dinner at his home on the Easton Avenue Turnpike, on Wednesday, May 13, at 7 p. m. About 30 physicians were able to attend. It was expected to hold the dinner at Dr. Johnson's mountain lodge at Dock Watch Hollow, but because of inclement weather a change was necessary.

Before dinner, Dr. Johnson very appropriately and with very sympathetic and touching attitude, spoke of the recent deaths of Dr. Gruessner and Dr. Schureman, speaking of their wonderful attributes and the great loss to the profession.

After 3-4 hours of complete relaxation, and with a satisfied gastro-intestinal feeling, the members adjourned to their homes, having spent a very pleasant and enjoyable evening.

## MONMOUTH COUNTY

W. Von Oehsen, Reporter

The regular meeting of the Monmouth County Medical Society was held Wednesday evening, April 29, at the Berkeley-Carteret Hotel, Asbury Park, Dr. William K. Campbell presiding. Minutes of the previous meeting were read and accepted.

Dr. J. Bennett Morrison, State Society Secretary, addressed the meeting on some phases of state medicine, acquainting the society with the workings of certain arrangements which approach state medicine in various sections of the world.

Dr. Henry O. Reik, Executive Secretary and Editor of the Journal of the Medical Society of New Jersey, spoke on the progress the Journal had made during the past year.

Dr. Harvey S. Brown brought to the attention of the society a letter which he had received from the Board of Governors of the Monmouth County Welfare Home. There was first a discrepancy in the length of Dr. Brown's service, and second, the fee basis was against the minimum fee schedule of the county society. It was moved by Dr. Stanley Nichols, seconded and carried, that the President appoint a committee to meet with the Board of Governors to arrange a satisfactory solution to this problem. Dr. Campbell appointed Drs. Harvey Brown, Fairbanks, Kazmann and Nichols.

Dr. James Ackerman reported for the Committee on Radio Broadcasting. It was brought up that heretofore the names of the doctors have not been used in the weekly broadcast and it was decided that hereafter the name of the speaker would be given, together with his subject and the fact that he was speaking under the auspices of the Monmouth County Medical Society. Dr. Ackerman reported that the subjects and speakers to date were as follows:

James E. Ackerman	History of Medicine
	Influenza
Joseph Ackerman	Psychology of Childhood
	Life Expectancy
Albright	Head Colds
F. J. Altschul	Diabetes
R. Appleton	Exercise
Joseph Bryan	State Board of New Jersey
Byron Blaisdell	Diet
J. C. Clayton	The Modern Heart
W. Campbell	Progress of Medicine
Henry Dorr	Aviation Medicine
S. Edelson	Regarding Mental Development of Children
	Tuberculosis
W. H. Fairbanks	First Aid and Fractures
D. F. Featherston	Care of the Nose and Throat
James A. Fisher	Tetanus
T. E. Fenton	Obesity (Treatment of)
W. Golsing	Cancer
W. G. Herrman	Cancer
O. R. Holters	Communicable Diseases of Children
Heatley	Schick Test—Dick Test
	Vitamins
S. Hausman	Skin Tumors
W. F. Jamison	Ethical Medicine as it Relates to Public Service
L. L. Leonard	Some Interesting Gynecologic Data
Robert MacKenzie	Prevention of Disease in Babies and Children
	Prophylactics in Children
Stanley Nichols	Obesity
Charles D. Prout	Something I Ate
H. G. Thomas	Emergencies
Daniel Traverso	First Month of Life
J. Villipiano	Contagious Diseases
W. Von Oehsen	Over-Heating of Houses
Robert Watkins	Medical Thoughts
Frank Wilbur	The Alleged High Cost of Medical Care
George Wilbur	Women in Medicine
G. V. Warner	
Helen Upham	

Dr. James Ackerman brought to the attention of the society the illness of Dr. J. C. Clayton. It was voted to send a letter of encouragement and flowers to Dr. Clayton. Dr. D. M. P. Magee also mentioned the illness of Dr. Garrison and the Secretary was instructed to write to Dr. Garrison.

Dr. George Van Voris Warner reported on the revision of the County Constitution and By-Laws and read the first draft. The President was to appoint a committee to review this draft and report at the next meeting.

Dr. W. G. Herrman suggested the formation of an Executive Committee to handle all routine business so that the meetings of the society would be confined to scientific discussions and such business as the Executive Committee thought should be brought before the body as a whole.

The paper of the evening was given by Dr. W. G. Herrman who spoke on "The X-ray and Radium Treatment of Uterine Hemorrhage". The paper was discussed by Drs. Slocum, Pons, Ackerman and Featherston.

A buffet lunch was served.

### MORRIS COUNTY

Marcus A. Curry, M.D., Reporter

A special meeting of the Morris County Medical Society was held at the State Hospital at Greystone Park, the evening of Wednesday, April 29. President Sutphen presided over a very gratifying attendance of approximately 80, including visitors, among whom were Second Vice-President Hagerty of the State Society, and a group of Hudson County physicians, including Drs. Arlitz, Cobham, Larkey, Maver and Stuart.

The president introduced the speaker of the evening, Dr. J. M. Wainwright, of Scranton, Pa., Chairman of the Pennsylvania State Commission, on Cancer, who provided a most interesting talk on "Interesting Conditions of the Mammary Glands and Nursing Habits of Native Women and Lower Animals", which was illustrated by lantern slides with pertinent comments and observations.

Dr. Wainwright prefaced his very interesting presentation by stating that it had not much to do directly with medicine of any kind but still the more we know of subjects allied to medicine the better off we will be. He spoke of books having been written on "From Fish to Man" and "From Ape to Man" and hoped some day something would be written about the mammary gland; that he had gotten up some interesting facts that he would present more or less disconnectedly.

His illustrations and explanations of the different locations in various animals of the mammary glands, and the evolution which seems to have brought about a reduction of the number of "restaurants" were very interesting and sometimes amusing; the female elephant seeming to be the only animal that has the udder and nipples between the forelegs; which he explained was a provision of nature so that the mother could supervise and manage any unruly young with her very useful appendage, the trunk, which could not be used so efficiently if the "restaurant" patronized by the young was situated in the extreme rear. He also illustrated and explained what to the uninitiated were novel locations of the nipples on what might be termed aquatic animals, these being on the side, and some up near the back, so that the young could ride along on the back of the mother through the water and suffer no inconvenience with the approach of hunger, and so

that the mother could gad about from place to place through the water without having to dock and lie down to enable the young to feed from beneath, as would be the case with most animals; also of interest were the mammary functions of some animals that had no nipples but simply by muscular contraction exuded the milk to the hair from which the young licked it and so fed themselves. Also interesting were the idiosyncrasies of the young of the pouch animals, where the young go to the pouch immediately after coming into being and hang on to their particular gland continuously until the time arrives for them to let go and maintain themselves otherwise; it seeming that if they should let go they are unable to recover the gland and they would perish; of further interest was the situation of the nipples on animals that slither along on their bellies, they being depressed so that they will not damage or wear in the process of travel, such as the seal, etc. While many of us are familiar with the bat it is unlikely that we are quite so familiar with the mammary features of this little bird-animal and the fact that bats carry their young with them on their flights, the young holding fast to the nipple with their claws; then when the mother hangs herself upside down on a beam for sleep the young bats reverse themselves and take hold of 2 unfunctioning nipples on the other end and thus maintain their hold on the mother bat and on life itself.

Dr. Wainwright's program provided a novel and interesting evening and he was given a fine round of applause, and upon the suggestion being made he promised to return sometime in the future and give a talk on the subject of cancer, his capabilities in this respect causing everyone to look forward with anticipated pleasure to that meeting.

Mention was made of the candidacy of one of our members, Dr. Julia C. Mutchler, of Dover, for the nomination of Assemblywoman from Morris County and the sentiment was that it would be in the interests and for the welfare not only of the county society but of the physicians of New Jersey if her nomination and election be effected, which is altogether within the realm of definite probability.

After the formal meeting Superintendent Curry of the State Hospital invited the members and guests to partake of refreshments, which they did with much enjoyment, in the employees' cafeteria.

### Special May Meeting

A special meeting of the Morris County Society was held the evening of Thursday, May 21, at the State Hospital at Greystone Park, with President Sutphen presiding and about 45 members and guests present.

Preliminary to the main purpose of the meeting, the President called attention to the annual meeting of the State Society at Asbury Park, June 3-5; that the golf tournament would be June 3 and for golfers to communicate with Dr. J. A. Fisher, Jersey Central Building, Asbury Park; and stating that we all should be pleased that Doctor Julia Mutchler, one of our members, won the nomination for Morris County Assemblywoman; also announcing that 2 applicants for membership, Drs. Ferris and Falvello, had been approved by the investigating committee and would be voted on at the next regular meeting.

The feature of the evening was a presentation by Dr. Joseph Jordan Eller, dermatologist, of New York; his subject being "The Diagnosis and Treatment of the Common Skin Diseases, with a Discussion of Precancerous Lesions". The 3 main types of skin diseases discussed were dermatoses caused



by various drugs, poisons and toxins; dermatitis caused by local or internal infections, and dermatosis caused by fungi.

Dr. Bart M. James, of Newark, lead the discussion which was also entered into by Drs. Costello, Christian, Collins, Young, F. Grendon Reed, Gibb, Allaben, and the questions asked were fully answered by the speaker of the evening.

After adjournment refreshments were enjoyed in the cafeteria.

### OCEAN COUNTY

Eugene G. Herbener, M.D., Reporter

The regular meeting of the Ocean County Medical Society was held at the Ocean House, Toms River, May 20, at 6 p. m. Those answering the roll call were: Drs. Woodhouse, Towbin, Ober, Goldstein, V. M. Disbrow, Sawyer, Brouwer, Harold B. Disbrow, Swan, Denniston, and Herbener.

The President, Dr. Adolph Towbin, called the meeting to order and extended a greeting of welcome to our new member, Dr. Ober.

The report of the Committee on Membership was received and Dr. W. E. Dodd, of Beach Haven, was unanimously elected.

Drs. Lieutenant Bruce Bradley, and Lieutenant Commander William W. Davies, of Lakehurst Naval Air Station, were elected unanimously to honorary membership in the society.

Drs. Towbin, Thompson and Swan agreed to represent our county in the Golf Tournament of the New Jersey State Medical Society to be held Wednesday, June 3, at the Asbury Park Golf and Country Club.

A general discussion of matters of minor importance followed, after which the meeting adjourned.

### PASSAIC COUNTY

W. W. Hall, M.D., Reporter

The regular meeting of the Passaic County Medical Society was held at the Health Center, Paterson, May 8, at 9 p. m. Dr. Carlisle presided. The minutes of the April meeting were approved as read.

The following applications for membership were received and referred to the Board of Censors: Drs. Morris H. Saffron, 200 Jefferson Street, Passaic; Jeremiah H. O'Brian, 204 Madison Street, Passaic; J. Thompson Stevens, 55 Park Street, Montclair.

The paper of the evening was presented by Dr. A. A. Berg, Attending Surgeon, Mt. Sinai Hospital, New York City. His subject was: "Surgical Treatment of Diseases of the Colon". The lecture was illustrated by numerous lantern slides. Dr. Berg's talk was closely followed.

The meeting adjourned at 11 p. m.

### UNION COUNTY

#### Summit Medical Society

W. J. Lamson, M.D., Secretary

#### April Meeting

The regular meeting of the Summit Medical Society was held at Wallace Pines on Wednesday, April 29, at 8.30 p. m., with the President, Dr. Smalley, in the chair, and Dr. Meeker entertaining. Present, 19 members and 3 guests.

A paper was read by Dr. Meeker, entitled "An Outline Study of Endocrines".

Dr. Meeker gave a comprehensive summary of our present knowledge on the subject of internal glandular secretions, symptoms caused by hyper and hypo-secretion, and the therapeutic use of hormones. Much remains to be worked out, however, before they can receive the value they must ultimately have in the treatment of various conditions in which they are indicated.

The paper was freely discussed by Drs. Dengler, Morris, Byington, Prout, Bowles, Jamison, Hallock, Moister and Johnston.

Dr. Byington called attention to the fact that 2 hormones, thyroxin and adrenalin, are already produced synthetically.

Dr. Morris likes to combine several hormones, and said it was necessary to continue their use over a long period of time to obtain desired results.

Dr. Prout, on the other hand, does not approve of pluriglandular therapy, but insists that indications for use should be carefully studied and then the appropriate hormone should be given, in order to test their true value.

Dr. Moister pointed out the fact that, with the single exception of thyroid substance, the glandular hormones should be given hypodermically rather than orally.

#### May Meeting

The annual meeting of the Summit Medical Society was held at Wallace Pines, on Tuesday, May 26, at 8.30 p. m., with the President, Dr. Smalley, in the chair, and Dr. Hallock entertaining. Present: 24 members and 5 guests.

The election of officers for the year 1931-1932 resulted as follows: President, Dr. Wellington Campbell, of Short Hills; Vice-President, Dr. Joseph E. Pollard, of Chatham; Secretary, Dr. William J. Lamson, of Summit.

The newly elected President, Dr. Campbell, then took the chair. The Secretary read an invitation extended to the society to attend the Graduation Exercises of the Training School for Nurses, at Overlook Hospital, on June 5.

The Secretary was requested to write and thank Mr. Thomas J. Watson, of Short Hills, and his foreman, Mr. William McCue, for entertaining the members of the society at his farm at Oldwick, N. J., on May 21, and for the opportunity of inspecting his model dairy.

A paper was read by Dr. Hallock, on "Factors Affecting the Length of Pregnancy".

There is no single standard of estimating this period—each man having a method of his own—but all are based on the date of last menstruation, date of quickening and height of fundus. The duration is apt to be less in young than in older women. On account of the uncertainty of some of the data on which the computation is made, it is wise to wait until within 3 weeks of the expected date before inducing labor.

Dr. Hallock described various methods for inducing labor—castor oil and quinin, pituitrin, bags, bougies, accouchment force and rupture of membranes, and cited reports and statistics to show the desirability of the latter method.

### WARREN COUNTY

Charles B. Smith, M.D., Secretary

The spring meeting of the Warren County Medical Society was held at the Elks' Home, Phillipsburg, April 23, being called to order by the President, Dr. Bossard, at 11 a. m.

Members present: L. H. Bloom, G. H. Bloom, H.

B. Bossard, G. W. Cummins, Paul Drake, L. W. Hackett, F. J. LaRiew, C. H. Lyon, C. B. Smith, T. F. Spillane and A. C. Zuck. Visitors present: Dr. George N. J. Sommer, Trenton, State Society President; Dr. F. G. Seammell, Trenton, Councilor; Dr. Frederick Roberts, of Easton, and Dr. Baldauff, recently located in Belvidere.

The minutes of the last meeting were read and approved. It was regularly moved and seconded that Dr. Baldauff's application for membership be accepted and referred to Censors.

The death of Dr. L. C. Osmun, of Hackettstown, which occurred on March 30, 1931, was reported.

The President appointed Dr. C. B. Smith, of Washington, as Secretary pro-tem.

The President also appointed Drs. A. C. Zuck and C. B. Smith to draw proper resolutions on the death of Dr. Osmun, who had served as Secretary of the Society for the past 7 years.

It was unanimously agreed that the cost of the room in Farrell Arms Plaza, Washington, N. J., where Post-Graduate lectures are being held, be paid by the society. It was reported that the lectures were most interesting and practical and very much appreciated by the members attending.

Dr. T. F. Spillane, of Phillipsburg, was elected to fill the unexpired term of Dr. Osmun as Delegate to the State Society. Dr. Osmun was elected on October 15, 1929, for a term of 3 years.

Dr. Frederick Roberts, chief of the Medical Staff of the Easton Hospital, read a very interesting paper on "Bronchial Asthma", and he was complimented by all the members who took part in the discussion, also by Drs. Sommer and Seammell for presenting such an interesting and practical paper on such a troublesome subject.

After a very good dinner, served at the Elks' Club, Dr. Sommer gave a talk on what the Society had done during the past year for its members, and Dr. Seammell told us how he got his start in surgery, his first operation being successfully performed on Dr. Reese's back porch.

## Obituaries

LINDLEY, Charles L., formerly of Lakewood, died at Los Angeles on March 26, 1931, in his seventy-seventh year.

Dr. Lindley was well known in Lakewood where he took an active part in the professional, social and sporting life of the resort. In health, 10 years ago, compelled him to take up his residence in California where, despite his advancing years, he enjoyed a retired life.

Dr. Lindley was born in Durban, Natal, South Africa, November 3, 1854. He was the son of Rev. Daniel Lindley, a missionary to the Dark Continent, and Lucy (Allen) Lindley, a descendant of Ethan Allen, of Ticonderoga fame. He received his early education in a German school in Hermannsburg, South Africa, and later studied in Vienna. He was graduated in 1897 from the College of Physicians and Surgeons, Columbia University, with high honors.

SCHUREMAN, James Percy, of New Brunswick, died in the Middlesex Hospital, May 6, 1931, after an operation for appendicitis. He was 51 years of age and had practiced in New Brunswick since 1905.

Dr. Schureman was a graduate of Princeton and the University of Michigan. He was a Captain in the Medical Reserve Corps, a member of the

Middlesex County Medical Society, the New Jersey and American Medical Associations and a Fellow of the American College of Surgeons. He was on the attending staffs of the Parker Memorial and St. Peter's Hospital.

### Resolutions on the Death of Dr. Charles J. Craythorne, Adopted by the Mercer County Medical Society

*Resolved*, That there be entered on the official minutes of this society, an expression of the great loss it has sustained in the death of Dr. Charles J. Craythorne. In the successful labors of a long life he has constantly added to the respect and dignity of our profession. Thoroughness and conscientiousness were characteristics of all his work. These qualities, added to ability and clear judgment, secured for him, in all his professional and personal relations, the confidence and friendship of those who have been associated with him.

*Resolved*, That we tender our sincere sympathy to his family and that the Secretary be requested to send them a copy of these resolutions.

N. B. Oliphant, Chairman  
Frank G. Seammell  
D. B. Ackley

### Resolutions on the Death of Dr. Raymond S. Seibert, Adopted by the Mercer County Medical Society

*Whereas* Almighty God has seen fit to remove from our midst, Raymond S. Seibert, M.D., a valuable member of the medical profession,

*Be It Resolved*, that in his death this society has lost a faithful and untiring member of the profession; a man who served his country in both peace and war; who spent unselfishly many hours of service for his fellow-men and in so doing impaired his health to such an extent that for the past 3 years he had been unable to follow his life's work. His memory will be cherished by his fellow practitioners who have adopted this resolution, and ordered that a copy be sent to his family.

Respectfully submitted,

J. H. McCullough, Sr.  
A. W. Atkinson  
W. E. D'Arcy

### Resolutions on the Death of Dr. William N. Stratton, Adopted by the Mercer County Medical Society

*Whereas* the members of the Mercer County Component Medical Society have suffered a great loss in the untimely death of Dr. William N. Stratton, one of the valued members of their society;

*and whereas* because of his kindness of heart and sincere devotion to the lofty ideals of his profession, the members of this society sincerely regret his passing;

*and whereas* we desire to extend the sincere sympathy of the society to his family in the loss of a kind and loving husband and father;

*Be It Resolved*, that as a mark of the esteem in which our late colleague was held by this society, this resolution be spread upon the minutes and a copy of the same be presented to his family.

M. M. Kent  
Harry Berger  
F. B. Zandt



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication®

Vol. XXVIII., No. 7

ORANGE, N. J., JULY, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## PRESIDENTIAL ADDRESS\*

GEORGE N. J. SOMMER, M.D., F.A.C.S..  
Trenton, New Jersey

Even if custom did not require it, I am sure that I should want at this moment to express to you my appreciation of the honor conferred upon me in the call to service as President of this ancient and honorable guild of physicians and surgeons. I have never cared especially for antiques merely because of their antiquity, but I confess to strong admiration of institutions that have continued to live for a long period of time and which have maintained consistently and persistently an active and praiseworthy existence. To have been deemed worthy to fill the presidential chair of the oldest and one of the most distinguished medical societies in this country, will ever be to me a happy recollection and I wish now to thank you, my colleagues and my friends, for this signal expression of your faith and trust. I was content to walk in the ranks of this noble company, but when you chose me to serve temporarily as captain, I determined to work in that position as I would in any other, to the best of my ability, realizing fully that no other honor, however great, can ever mean so much to me as does this one that I now gratefully acknowledge.

As your leader for the past year, the time has come to render an account of my observations. At the time when our society inaugurated the plan of having an annual presidential

address, it was customary to present a discourse upon some scientific subject related to the practice of medicine. Since then, however, many things have changed and nearly every aspect of the presidency appears different today from the picture 20 years ago. I could, and felt very much inclined to, speak to you of some one of the many interesting surgical questions of the day, but the science of medicine has gotten so far in advance of its practice that it seems better to discuss problems that are more in need just now of serious consideration. So, following the lead of some of my immediate predecessors in this office, I shall devote this time to a short review of my official conduct and present for your further consideration some of the more pressing questions now demanding the attention of organized medicine.

Accepting the task as both a duty and a privilege, I have during the year visited all but one of the 21 county societies while in session, participating when I could in the discussions of scientific papers and conferring with them on matters that affected their relationship to the state and national societies. In addition, I managed to attend 3 of the 5 Councilor District meetings, 3 Tristate Conferences, the Annual Conference of Secretaries and Reporters of our own component societies, and accompanied Morrison and Reik to the Annual Conference of Secretaries and Editors of State Societies held in Chicago under the auspices of the American Medical Association. The presidency of the American Medical Association has become a full-time job, with burdens that weigh heavily in the balance against the honor of holding that

\* (Delivered at the 165th Annual Meeting of the Medical Society of New Jersey, at Asbury Park, June 5, 1931.)

office. From practical experience I can tell you that presidency of the state society is no longer a sinecure, but is rapidly becoming a full-time job. My deep personal interest in the economic as well as the scientific problems of the day, and my affection for members of the medical profession, have, however, made the work pleasurable.

Those of you who have not had so full an opportunity to meet with confrères of counties other than your own, or from other parts of the nation, may find it difficult to understand why economic problems have suddenly come to occupy such a prominent position, but, as was pointed out by the Executive Secretary in the last of his travel articles, those who now occupy official positions are finding themselves in the midst of turbulent conditions and faced by controversies, by prophecies and by threats, that compel thought and sometimes decisive action. I am not greatly alarmed by the threats of legislative action looking to the control of or to interference with the practice of medicine, but some of the problems being discussed in lay magazines and some of those appearing in the columns of national and state medical journals, are of sufficiently serious import to require contemplation and possibly preparation for organized action. After the recent proposed settlement by Great Britain of an age-long dispute with India, it was said of the English Ambassador: "It is an achievement of Lord Irwin to have robbed India of grievances. In that he has shown great statesmanship." It may be the part of wisdom to settle *some of our controversies* by depriving the public of its grievances, *real or imaginary*.

At the county society meetings, all over the state, the economic problem most frequently encountered has been one always in some manner related to enforcement of the Workman's Compensation Law. The very frequency of the question's appearing would seem to indicate that there is much dissatisfaction resulting from the manner in which insurance companies deal with physicians in paying for medical service. Some of the trouble appears traceable to physicians not understanding or not complying with the law, but many instances are reported where action

of the insuring agent, or the employer, seems to have been arbitrary and unreasonable, and not infrequently physicians have been disrespectful to the rights of one another. An advisory commission, appointed by the Commissioner of Labor, has, after a year of investigation, just made a series of recommendations designed to improve conditions for those who handle compensation cases, said report having been published in the May Journal. Whether or not those recommendations, supposing that all will be adopted, will remove all causes of dispute remains to be seen; undoubtedly, the situation may thus be improved, but as similar laws are being passed and put into effect in other states, differing in some respect from ours, and as there are many aspects to some of the disputes, involving questions of ethics as well as of economics, it may not be amiss to provide a special committee to study the whole problem and to make recommendations in the event that it is considered desirable to have the law amended. At the same time we should keep in mind the fact that New Jersey is now favored by having a better Workman's Compensation Law than other states; a state of affairs for which the profession owes thanks to Dr. McBride and previous welfare committees.

A close second to this problem is that which concerns the growth of industrial medicine and contract practice. Here, too, we seem to be in need of an investigating committee to ascertain facts upon which action may be based. New Jersey, especially in its northern half, is becoming highly industrialized and with the growth of factories, both in number and in size, there is developing a form of medical practice often referred to under the general term of "industrial medicine". It has been pointed out that the medical profession has for years past encouraged factory owners and department store managers, for instance, to employ physicians to take care of their employees, especially to render treatment in the event of accidents and emergency illness, and the employers have learned that it pays better to keep the employees healthy than to allow them to become sick from any avoidable disease. Having promoted the idea, can we now declare that physicians engaged in



such work are practicing unethically? In some fields of industry this type of practice is carried on under special contract, and thereby comes under consideration in relation to our opposition to contract practice in general. Such contracts were not dreamed of at the time when our rules were made, and it seems necessary now to modify the language of those rules or to issue an interpretation of them for guidance of those who, by written or verbal contract, engage in such medical practice. It is useless to denounce physicians for doing things that are beneficial to the public, and which are in themselves both right and proper, merely because the *letter* of the code is against them; it is the *spirit* of the code about which we should be most concerned, and everybody involved must wish for clarification of this situation. The Mercer County Medical Society, having this matter under consideration at a meeting in February 1930, decided that contracts negotiated by any of its members should be in accord with the principle of "covenants openly arrived at", and adopted the following resolutions, which seem reasonable and satisfactory:

(a) This society believes that contract practice, except such as this society shall sanction as reputable under existing compensation laws, is at variance with the Code of Medical Ethics and derogatory to the dignity of the profession.

Therefore, the name of any member receiving or renewing such contract shall, *ipso facto*, be dropped from the roll.

(b) Any member having or considering a contract under existing compensation laws shall present a certified copy of the contract to the secretary of the society.

Such contract shall be presented to the society at a regular meeting, and be referred to the Board of Censors, who shall consider such contract and report to the society at the following meeting.

Any member failing to present such contract to the secretary will be dropped from the roll, after due action by the society.

(c) Any physician engaged in contract practice, making application to the society for membership, shall present with his application a certified copy of his contract.

While dealing with the general subject of contract practice, I may be allowed to report an action taken by the Mercer County Medical Society with relation to physicians' holding full time institutional positions engaging in private outside practice. Inasmuch as the whole matter is embraced in a single communication from Commissioner Ellis, of the Department

of Institutions and Agencies, I will simply read that letter:

"Dear Dr. Sommer:

The State Board of Control has taken the following action in reference to the consideration of the work of physicians' giving full time to the state institutions:

At a meeting under date of May 27, a resolution was passed as follows:

'WHEREAS, the Mercer County Component Medical Society has brought to the attention of this Board by resolution its intention to eliminate from that society physicians employed on full time in state institutions who receive maintenance and engage in outside practice, and

WHEREAS, the State Board of Control has considered carefully the questions involved,

BE IT RESOLVED that we here record our decision that physicians who are employees of state institutions shall not make use of equipment or facilities for the treatment of persons not regularly committed to such institutions and that the use of dwellings or other state property for private practice is contrary to the policy of the State Board of Control.'

At the meeting of the State Board of Control on Tuesday, June 24, the following resolution was passed:

"Dr. Dowd reported that the State Board Committee, together with representation of the medical membership of the local institution Boards, had conferred with a committee of the Mercer County Medical Society, and that it was the recommendation of the State Board Committee that positions of physicians residing in the institutions should be clearly set forth as full-time positions, and that all extra-mural work outside the institution should be limited to consultation work in their special fields.

The State Board concurred in the recommendations made by Dr. Dowd for the committee and commended the committee for its work in this connection.'

I have transmitted to the Presidents of the Boards of Managers of the several institutions copies of the above resolutions.

The State Board understands that the above policies were made after conference with the medical members of the local Boards of Managers. It is the understanding of the State Board that the policy as outlined met with the full, cordial coöperation of the various state institutions and the professional medical staff of each of the institutions. It is, of course, the idea of the State Board that the local Boards of Managers will work out the administrative details of applying the policies as outlined in these resolutions.

We all understand the desirability of making it possible for the professional medical staff of the institutions to maintain professional contacts of the consultation type with other men in the profession.

I will be very glad to have you bring this action of the State Board to the attention of the State Medical Society and the officers of the Mercer County Component Medical Society."

I wish to express appreciation of the courteous coöperation received in this matter from Commissioner Ellis, Dr. Dowd and Dr. Raycroft.

At the several Councilor District meetings,

as well as at some of the county society gatherings, considerable attention has been devoted to economic problems. At the first district meeting, held in Newark, the single topic was "state medicine". At the second district meeting, the number of topics was greater but the principal one concerned recognition and classification of specialists, and resolutions were adopted to be passed on to this society. At the fifth district meeting, in Atlantic City, Dr. John Hartwell, of New York, discussed this same question and described the plan being put into operation at the New York Academy of Medicine to improve conditions in that city.

One cannot read the numerous magazine and newspaper articles and the now considerable number of books criticizing the medical profession for laxity in providing safeguards for the public against unqualified specialists, without recognizing the fact that some of the complaints are justified and that even the exaggerated statements used by some lay writers have a certain foundation in fact. It would seem to be our duty to give thought to these matters and to make an attempt, at least, to meet the wishes of the public with respect to exerting some control over those members of the profession who hold themselves out to be surgeons or specialists, and to provide the people with some means of recognizing those physicians whom we consider qualified to practice as specialists. There is nothing unreasonable about such a proposition and we may better cooperate in the movement than be compelled to submit later to more regulatory laws.

Nor can one read the legislative records of the past few years without realizing that so-called "state medicine" may be our fate if we persist in ignoring problems that require our help for proper solution. At the most recent Tristate Conference, one of the speakers called our attention to recent national legislation extending medical care and hospital privileges to war veterans and their families, and asked if we realized that by changing a very few words in now existing laws state medicine in its full sense could be established on a national basis.

Our Journal Editor has given us a sum-

mary of the national health insurance laws now operative in other countries, and has pointed out the gradual encroachment upon our own territory. During the earlier months of this year the states of Massachusetts and New York both had such laws to fight in their legislative chambers. We are, apparently, in no immediate danger but does not that fact suggest that this is an opportune time to consider these things in order that action may be taken to prevent the introduction of such acts—by removing the existing incentive—or to prepare for that fight which will otherwise inevitably come. At the meeting of Secretaries and Reporters of County Societies, in Trenton last November, a resolution was adopted requesting this society to appoint a commission to study the state medicine problem; and at the Second Councilor District meeting, as I have already stated, resolutions bearing upon the control of specialism were adopted for passage along to us. I commend these resolutions to your careful consideration. There is nothing to be gained by shutting our eyes against obvious facts; much *may* be gained by cooperating with other institutions and organizations and by an honest effort to correct any evils that may be found in our own practice—thus to deprive critics of any basis for proposing new legal enactments.

In the matter of legislation, we have successfully passed through another year. Our greatest concern was aroused when the General Assembly had under consideration the so-called Abell Bills. In an effort to improve governmental business, the investigating commission presented a group of new laws, most of which were good, but the mistake was made of going to extremes in one matter and of framing an act without full knowledge of its probable effect. In that matter we were glad to cooperate with other organizations concerned—especially the dental and pharmaceutical associations—and our joint efforts resulted in prevention of an apparent calamity. A closer alliance with such other organizations should be cultivated and I hope will now be maintained steadily.

Among many propositions that have come to hand during the year is one requesting our cooperation with the State Hospital Associa-



tion in asking the Governor to appoint a special health commission to study and make recommendations for modernizing the health activities of New Jersey. We were informed at the Tristate Conference in February that a similar commission, appointed by Governor Roosevelt, of New York, had about completed a report, after making a survey of conditions in that state. Since that time most of Governor Roosevelt's program has been enacted into law and we might well profit by New York's experience. At our last annual meeting, Mr. Bowen, Director of the State Department of Health of New Jersey, described conditions in this state and asked our support in bringing about improvements. Nothing was done about it at that time, and I think it would be wise to take some action now; perhaps through the channels named, co-operation with the State Health Department and the State Hospital Association.

The Tristate Conference also had under consideration a paper written by one of our own representatives on the question of Increasing Fatalities Caused by Automobiles, and a plan calling for physical examination of all applicants for a chauffeur's license was unanimously adopted. We hope you will adopt the recommendations, which were published in the February Journal, and take such steps as may be necessary to induce the Commissioner of Motor Vehicles to put some such plan into effective operation. Incidentally, let me say that the importance of these Tristate Conferences can scarcely be overestimated. The State Medical Society officers of New York, Pennsylvania and New Jersey are meeting 3 times a year to consider important questions that concern the physicians of these states, and it has been both illuminating and pleasing to take part in their deliberations. Our hearty support has been given to the movement from its inception and I recommend that it be continued.

Observing closely the immense amount of work being conducted from our Executive Secretary's office, I have been tremendously impressed by the necessity for a permanent home for this society, with proper equipment

and facilities for housing records, for preserving a working library, for conducting the Journal, for directing our public educational program, for all the functions of the organization including provision for committee meeting rooms and possibly a hall large enough to accommodate the society in its annual convention. This question has been considered by some of my predecessors and it has been my pleasure to aid in developing some plans which we hope may prove effective in the course of time.

When visiting the county societies, it has been my pleasure in many instances to attend meetings of the Woman's Auxiliary to those local bodies, and I know something of the work and plans of the state auxiliary and the national organization attached to the American Medical Association. This entire movement has developed within a very few years and can scarcely be said to be yet well established. Its success is going to depend in the main upon the support given by our own societies. In states and in counties where the physicians encourage the auxiliary, there will surely develop a strong organization with potential possibilities for helping the medical societies. In states or counties, where such encouragement is withheld, progress will necessarily be slow. Where any degree of active opposition exists, even on the part of a small minority of the medical society members, the auxiliary cannot live. I am very earnest in seeking support for the Woman's Auxiliary, believing fully that we can trust our wives to look after our interests as carefully as we would ourselves. Several years ago a committee was appointed to serve the auxiliary in an *advisory* capacity but it seems desirable now to have such a committee given the duty of outlining a policy or course of action for the auxiliary, to coöperate constantly with the auxiliary in developing its work, and to supervise its activities. Our women are interested in our professional as in our home affairs, and I believe there is a slogan expressing that interest, in the phrase—"The home, the profession, and the public health." Where county auxiliaries are properly established one notices a

greater sociability and better understanding among the families of physicians, and there has also resulted an increase of attendance at those county society meetings. Effective organizations, fully functioning, can also help us in legislative matters, particularly in opposing acts that threaten the welfare of our profession, for the women are quick to realize that whatever strikes at the income of the physician necessarily affects the home and family life of the physician.

When Governor Larson, responding to the appeal of President Hoover, called a State Conference on Child Health and Welfare, I directed our Executive Secretary, Dr. Reik, to represent this society in the organization plans, and you have heard from him and from those of our members who participated in the several conference sections what results were obtained. I hope that everything possible will be done to further the aims and objects of those national and state conferences and that the children of New Jersey may benefit from our help in vitalizing the child health program.

Although it was not directly related to that program, I might mention here that the General Assembly of New Jersey passed a law, at its last session, providing for a permanent commission to care for the crippled children of this state, and, as one member of that body must be selected from the State Medical Society, I have asked the Trustees to name 3 members from which list the Governor may select one for appointment.

During the month of May I attended the Eighth Annual Conference of Midwives, sponsored by the Bureau of Child Hygiene, of the State Department of Health, directed by Dr. Julius Levy, and Dr. Reik attended the Conference of Nurses of the Child Hygiene Bureau, and both of us were impressed by the good work performed by that Bureau. It was pleasing to learn that there are now no unregistered midwives in this state; that these practicing midwives are keen for post-graduate courses of instruction and strive to win approval of their study and accomplish-

ments; and that the spirit of coöperation between these inspectors and the midwives is perfect. I trust you will keep in mind the fact that the midwife is an essential factor in the obstetric field and that it is our duty to aid in her education and to promote further development of the plans so well started. Some of the hospitals might offer the use of their facilities as have the 2 institutions that now provide courses in midwifery.

One of my first official acts consisted in taking the liberty of inviting the 3 vice-presidents to sit *ex-officio* in all Welfare Committee meetings. I believe the plan has worked satisfactorily and that it should become a fixed feature. It affords an opportunity for the vice-presidents to become acquainted with the problems confronting the organization and to learn about the details of organization work, so that when they reach the presidential chair they will be fully informed as to their duties and obligations.

The Welfare Committee is a very important factor in our organization, and I wish to thank that Committee, and particularly its Chairman, Dr. Lippincott, for the excellent service rendered this past year. So, too, would I thank the Field Secretary, Mrs. Taneyhill, for the effective manner in which she has carried to the public our campaign of public education in preventive medicine.

In closing this review of my service, I wish to acknowledge my indebtedness to all those who have assisted in making my administration a success. Particularly do I offer thanks to the Secretary, Morrison, and the Executive Secretary, Reik, for their guidance and coöperation. Presidents come and go; the tenure of office is short, and usually the president enters into office ignorant of his duties and responsibilities. Secretaries, if they be good ones, are retained in office and become the embodiment of all the knowledge, history of the past, and methods of procedure so important to the smooth running of an organization. We are fortunate in having 2 such reliable, loyal and efficient secretaries, with whom it has been a pleasure to work.



## THE GENERAL PRACTITIONER AND OBSTETRICS\*

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It is furthest from my desire, as one who perhaps pretends to specialization in obstetrics, to "talk down" to the general practitioner, for 2 reasons:

First, the specialist obstetrician must originally be, and must remain, a general practitioner. He is treating human beings who are subject to the varied ailments which all human beings of their sex and age group are. In many cases, the fact of their pregnancy is hardly more than incidental; in many others it is of importance chiefly by reason of its effect on some other clinical condition present. So that there commonly come under the care of the obstetrician, cases of biliary tract disease, gastric conditions, diabetes, appendicitis, colitis and hemorrhoids; of endocarditis, myocarditis and vascular disease; of pyelitis, nephritis and uremia; of pneumonia, pulmonary tuberculosis, scarlet fever, erysipelas, meningitis, malaria and septicemia; of chorea, hyperthyroidism, neuroses and psychoses. He encounters dangerous hemorrhage and shock more often than the traumatic surgeon and has to be as thoroughly at home in pelvic pathology and intraperitoneal manipulation as the gynecologist. So that it is as one to another that he talks to general practitioners.

On the other hand, in his devotion of time to the larger obstetric material which it is his privilege to serve, he largely loses his finesse in handling all these other varied ills of mankind, and must perforce avail himself constantly of the help of internists and surgeons. So that my admiration is large for the man who, handling his obstetric cases competently, just as competently handles without aid his cases of diabetes, pneumonia, syphilis, fractures, appendicitis and heart disease.

Secondly, obstetrics belongs largely to the

general practitioner. Statistics are not compiled specifically for the purposes of this talk, therefore it is hard to arrive at close calculations of just how largely this is true. Guesses sufficiently close can be arrived at, however. In 1930 there were in the state 68,325 living births. The proportion of midwife deliveries throughout New Jersey is 14.8%; so, 58,211 births were attended by physicians. Probably about 18% of these occurred in institutions. If we assume, an assumption not of course valid, but convenient at this time, that all of the institutional births were attended by specialists, and that none of those outside of institutions were, we find that 47,829 births, or 70% of them all, were cared for by general practitioners in the homes of patients, which is no mean score for the general practitioner.

This may logically prompt the question as to how well the general practitioner is doing his obstetric job. No absolute answer can be made to this, nor are invidious statements necessary, nor intended. In general, a man's obstetric practice is on a par with his other work. A careless medical man will do careless midwifery; one who lacks a conscientious attitude toward his other patients will show a similar lack toward his pregnant ones; one who takes a careful history on, and competently examines and watches, his stomach cases, will warrant the confidence of his expectant women; one who cares enough for his work to train himself to deft, gentle manipulation of gall-bladder and stomach is apt to have proper regard for the soft parts of the parturient, and to handle the fetus gently and skilfully. I am inclined to feel that the graduate of the last few years has had opportunities for undergraduate and hospital training that my own student years did not afford. Therefore, other factors of capacity and personality being the same, the young practitioner of today should be a better one, and his obstetrics should be better, than was the case a generation since. And I am sure, from my own observation, that these things are true. Not so often does one hear, as formerly, of doctors engaging confinement cases with no expectation of seeing the patient again before labor starts. Doctors, young and old, *are* watch-

\* (Read at the Osler Society meeting, Jersey City, February 17, 1931.)

ing their pregnant women more closely and intelligently than they used to and the change is of tremendously beneficial importance to womankind. For in obstetrics as in other fields of medicine, prophylaxis is the true keynote of enlightened practice. The salvage of maternal and infant lives dependent on alert watchfulness in the prenatal period is directly proved. In New York State, in 1930, while the uncontrolled neonatal mortality was 42:1000, that in the group of mothers known to have been under good prenatal supervision was 28:1000. This would mean a saving of 957 babies in 1 year, in New Jersey, if such supervision could be extended to all pregnant women. The statistics from all centers where prenatal care has been established indicate an equally salutary improvement in the incidence of life-threatening conditions in mothers, notably in relation to severe toxic conditions.

In the actual conduct of labor the practitioner encounters his greatest test, for it involves diagnostic acumen and judgment, mechanical dexterity sometimes of high order, and the maintenance of surgical cleanliness under difficult conditions. A local practitioner of gracious memory who served very many women in child birth, is reported to have said that there were 2 classes of labor cases: Those which needed no doctor, and those which needed 2. While somewhat inaccurate, as such aphoristic statements generally are, it indicates at least 2 important truths. The majority of labors will terminate spontaneously and will need no doctor to meddle with the normal processes of Nature's own mechanics; 100 years ago Ramsbotham, of London, reported 19,439 deliveries in 8 years, with the following "difficulties and irregularities":

Adherent and retained placentas	135
Forceps extractions	35
Craniotomies	25
Vectis cases	1
Difficulties due to transverse presentation, etc., presumably relieved by version	68
A total of	264

or an incidence of operative delivery of only 1.35%. This demonstrates the fact that in nearly all cases women can actually extrude a conception product, even at term, without artificial assistance, if they have to. Unfor-

tunately, Ramsbotham's table does not give the average duration of labor, maternal mortality, fetal mortality, nor the cost to mothers in terms of invalidism of such extreme conservatism, though he does confess to 5 ruptures of the uterus and 1 of the broad ligament. Certainly it is to be feared that today such over-conservatism would not be popular with the ladies.

As perhaps fairly typical of present practice, on my own service at Jersey City Hospital in 1930, in 1784 deliveries there were:

Adherent and retained placentas	12
Forceps extractions	241
Craniotomies	0
Versions	35
Cesarean sections	25--1.4%
Hysterectomy	1

Total incidence of operative delivery 314 or 17%  
Of this series, the maternal mortality was 0.67%, the neonatal 3.3%

The incidence of forceps delivery in this series is artificially high, due to extensive experimentation during this period with spinal anesthesia and "elective" use of forceps. A normal incidence of forceps operations would reduce the total operative incidence to about 9%.

Thus we see that even in the face of easier recourse to operative delivery of present day practice, 90% or more of cases will deliver spontaneously, requiring of the medical attendant wise watchfulness and estimation of the situation, the maintenance of cleanliness, the moral support of the patient and her friends, her protection from excessive soft tissue damage, the repair of that which does occur, the exhibition of pain palliative agents, and appropriate care of the new-born. This sounds like, and is, a great deal, and would seem to give the lie to the statement quoted that such a case does not need a doctor.

But a well-trained nurse-midwife might do all or nearly all of it competently. And the doctor errs most frequently in not being content to do *only* these things. The most frequent valid criticism of him is, that goaded by his own limitation of time and the importunities of the suffering woman, he is too ready to resort *prematurely* to operative delivery in cases quite capable of spontaneous termination if reasonable patience be ex-



exercised. The most frequent error observed in consulting practice is the employment of forceps before there is full engagement of the head or full dilatation of the cervix.

In reference to the last statement I would particularly stress certain definitions. Full engagement of the head signifies such a degree of moulding that the maximum plane of the head must coincide with, and occupy, the least plane of the upper strait of the pelvis. Until this takes place the head cannot be extracted with forceps without undue trauma. If additional time for spontaneous moulding fails to attain this object, cesarean section must be considered as an alternative, unless contra-indication exists to the latter procedure. Yet in many cases, before the greatest diameter of the head is actually engaged, the elongated peak thereof will be well down in the pelvis, and give to the person of limited experience a false estimate of the progress of accommodation to the inlet.

The complete dilatation of the cervix is in itself a good gauge of the complete moulding and partial descent of the head. It must be not only dilated, but retracted, so that no portion of it can be felt around the head except perhaps a small segment anteriorly.

Only in the presence of such conditions should the forceps be used without the gravest consideration. For to do so endangers the integrity of the cervix and the contiguous soft parts, and constitutes a grave jeopardy to the baby. Yet, frequently one receives in the hospital or sees in consultation cases in which these inhibitions to the use of forceps have been disregarded with pitiable results.

Morphin or one of its equivalents is the great conservator of the natural expulsive forces which will frequently convert a difficult, dangerous, so-called "high forceps" extraction into a relatively safe and much simpler operation.

This brings us to the second part of the aphorism quoted above, to the effect that a case needing operative relief "needs 2 doctors". Is this true? Yes, emphatically. There are vaudeville performers who win applause, and, one hopes, a livelihood, from their ability to play a whole orchestra of instruments

at once, all by themselves. But for a man conducting any manipulation upon which 2 lives depend, to attempt alone to perform the duties of anesthetist, assistant, instrument nurse and operating surgeon, is fool-hardy in the highest degree. No young practitioner is too poor to pay the extra expense for help, himself, if necessary; no old practitioner is so extra good that he can always get away without it successfully. I know, because I have been all the things named; young—poor—foolhardy—and am getting old.

Ideally, of course, all such cases should be institutionalized. In saying this I know the reluctance of certain types of people to leave their homes under even urgent circumstances. This can usually be overcome by sufficiently strong representation of the situation, however, especially if backed up by a threat to otherwise resign the case. It may be urged that closed staff arrangements in the several hospitals preclude universal reference of complicated cases to institutions, yet there have always been available for financially competent patients, accommodations in institutions with "open" or "courtesy" privileges extended broadly to the profession. In cases financially incompetent the desire to retain the case at the sacrifice of the patient's interest may be more selfish than conscientious.

The conservation of the physician's time and nervous energy in having his patient under competent nursing observation, the assistance of interns, and the facilitation of his own work by adequate equipment, will pay him for insistence on institutional care apart from considerations of his patient's welfare.

Finally, I think the practitioner should remember that obstetricians are available for consultation. Recently a physician said to me—"I always feel stultified in calling an obstetric consultant." I said: "Why? You would not hesitate to call an internist in a case of pneumonia for which it is probable you would be doing all that he could suggest your doing. Certainly you would promptly call a surgeon should you diagnose acute appendicitis or mastoiditis. In neither case would you feel 'stultified' nor would your patients impute incapacity to you. To feel differently about an

obstetric case presenting unusual difficulty, is either to deny equal importance to a matter involving 2 lives or to deny to all your colleagues experience and dexterity possibly superior to your own."

Obstetrics should be conceived by the general practitioner, not as a necessary nuisance, but as an important, dignified branch of medicine belonging peculiarly to him, worthy of his most painstaking, conscientious service, in which he should avail himself when necessary of the coöperation of experts to the end that mothers and babies may receive the fullest benefits that modern surgical science is capable of affording them.

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### CONSIDERATION OF THE CAUSES OF DIARRHEA\*

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Beverly, N. J.

When the term "diarrhea" is used one implies a lessened consistency and usually an increased frequency of the stools. The lessened consistency need not be extremely marked, because we may consider it as diarrhea where there are but a few soft stools in which mucus, pus or blood is noted. Diarrhea includes not only the forms due to disease of the gastro-intestinal tract but also those due to conditions arising outside of the tract, such as are observed in toxic states and in disturbances of the nervous system of a functional nature. Loose movements are usually caused by stimulation of the bowel due to increased peristalsis which may be found in both the large and small intestine. Irritating substances may cause the fluid contents to be carried rapidly into the colon, preventing absorption in the small intestine, or causing an outpouring of water from the blood into the bowel with increased production of fluid or mucus. Again, the increase in peristaltic movement may be due to lesions in the bowel itself, such as inflammatory changes, ulcerations, growths or obstructions.

In studying the causes of diarrhea it is important to determine the intestinal site of the disturbances and note whether or not the peristalsis of the small bowel is increased with that of the large. When diarrhea originates in the small intestine the stools show an acid reaction, food particles poorly digested, mucus intimately mixed with the feces, and unreduced bile pigment. When it originates in the large intestine the stools show usually an alkaline reaction, food particles well digested, free mucus and reduced bile pigment.

Like most other medical subjects, the diarrheas may be divided into acute and chronic forms. Most of the acute forms will fall into 1 of 4 large groups:

(1) *Diarrhea due to improper food.* Indiscretions in diet with a resultant gastro-enteritis are often followed by diarrhea. The food may be coarse, improperly prepared, not thoroughly masticated, taken in too large quantities, or too hot or too cold. A violent diarrhea usually accompanies food poisoning from tainted meat, sausage, milk, fish, spoiled vegetables and food infected with various microorganisms.

(2) *Diarrhea from intoxication other than foods.* This condition may be caused by poisons or medicine. Drugs such as mercury and arsenical preparations, and drastic purges such as jalap, senna and podophyllin are examples. Poisons such as phosphorus, mineral acids, alkalies and bichloride of mercury may cause acute diarrhea when taken internally.

(3) *Diarrhea in acute infectious diseases.* In acute infectious diseases, like measles, influenza and pneumonia, diarrhea is often secondary to the associated gastro-enteritis. The specific infections in which diarrhea is preëminent are typhoid, cholera and dysentery.

(4) *Diarrhea from nervous influences.* This type of diarrhea is a result of either excessive stimulation of the nerves controlling peristalsis or from the pouring out of serous material into the bowel, produced by nervous influences.

The stools in acute diarrhea are frequent and watery, contain mucus and undigested food, and there is generalized abdominal pain,

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\* (Read at the Burlington County Medical Society meeting of January 14, 1931.)



lack of appetite, weakness and malaise. When there is an associated gastro-enteritis the nausea and vomiting may overshadow the intestinal condition. In severe cases, fever and albuminuria are present and an alarming state of weakness may ensue. Nervous diarrhea usually has a sudden onset and terminates rapidly. This condition often appears in individuals in normal health when overworked or under a strain, as for instance in students preparing for examinations. There may be a few or many watery, thin stools a day with a small amount of mucus and undigested food particles.

It is extremely difficult to arrange a satisfactory classification of the varieties of chronic diarrhea. The causes are many, and today with the finer methods of diagnosis the group is an extremely large and diversified one. Moreover, no matter what classification is made, some of the groups will be very similar and will overlap, and this increases the difficulty in differentiation. The following is the classification of Friedenwald and Morrison, based so far as possible on etiology of the condition.

*Diarrhea due to achylia gastrica.* While about 30% of the patients affected with achylia gastrica present diarrhea, it may also occur as a result of the diminution of gastric secretion in chronic gastritis. It is believed that owing to the lack of digestion in the stomach, caused by the lack of HCl and the lessened pepsin secretion, undigested food is thrown quickly into the bowel and acts as a mechanical irritant. It also often happens that because of impairment of activity of the pancreatic secretion, due to the absence of HCl, fermentation occurs in the intestine and produces diarrhea. In the early stages diarrhea is intermittent with periods of well being extending over days or weeks; it soon becomes more frequent, until it is almost constant. Often, most of the stools occur before noon, are yellow in appearance, foul smelling, and contain undigested food, mucus, and sometimes blood. A fractional gastric analysis reveals an absence of free HCl.

*Diarrhea due to disturbances of pancreatic function.* In diseases of the pancreas there

are often large irregular stools with alternating constipation and diarrhea. Deficiency or absence of pancreatic ferments may be determined by use of a duodenal tube, and a constant absence of one of them is, according to Einhorn, indicative of chronic pancreatitis. Here we have marked diarrhea, emaciation, colicky pains, and often sugar in the urine. Diarrhea is often intense in carcinoma of the pancreas, with occasional fatty stools. After a time jaundice appears, the liver enlarges and becomes nodular, the urine contains sugar, and cachexia is evident. This affection is so frequent that whenever a persistent diarrhea is observed in a person over 40 years of age, which cannot be accounted for by the usual causes, carcinoma of the pancreas should be borne in mind. Pancreatic cysts give rise to diarrhea not only on account of the disease present in the pancreas, but also due to the pressure on the abdominal organs as well.

*Diarrhea in disturbed liver function.* In a small percentage of cases of disturbances in hepatic function, diarrhea appears, but constipation is the rule. Cases described as biliousness or "torpid liver", the Lyon method of nonsurgical drainage of the biliary tract has shown to be due to infection in atonic gall-bladders. These patients are sallow in appearance, weak, affected with indigestion, and are frequently the subjects of sick headaches and migraine attacks. Constipation is usual, but a certain few have identical symptoms with the exception that the constipation is replaced by diarrhea. In Weil's disease, together with the chills, fever, headaches, muscular pain, jaundice and gastro-intestinal disturbances, diarrhea is usually present. It is not uncommon in active and passive congestion of the liver and also in atrophic and hypertrophic cirrhosis.

*Diarrhea due to chronic intestinal catarrh.* Chronic enterocolitis often results from an untreated or unhealed acute catarrh; it is often caused by an abuse of laxatives and errors in diet. There is usually a persistent diarrhea extending over several years with frequent acute attacks associated with pain and tenderness over the colon. The stools are thin, watery, offensive, contain considerable mucus and vary from 3 or 4 to 8 or 10 a day. In intes-

tinal fermentative dyspepsia, carbohydrates are digested imperfectly, and the undigested matter undergoes fermentation, becoming acid, producing gas and giving to the stools a putty, foamy appearance with very sour odor. In addition to the diarrhea, abdominal pain, gurgling and distention are often noted. This condition may be primary disease or secondary to catarrhal affections of the intestines or to achylia gastrica.

*Ulcerative colitis, sigmoiditis and proctitis.* Of the ulcerations of the large bowel leading to diarrhea the most frequent are entamebic, bacillary, tuberculous, syphilitic and carcinomatous.

*Entamebic dysentery.* This is a frequent form of dysentery, and the entameba should be looked for in all cases of chronic diarrhea. In doubtful cases the organisms are best observed in scrapings obtained from ulcerations, through the proctoscope. In this disease there are 10 to 20 stools a day containing mucus, pus and blood. When the stools are passed the patient is affected with colicky abdominal pains, often associated with tenesmus, and in addition there are fever, emaciation and exhaustion.

*Bacillary dysentery.* The symptoms are similar to those in the entamebic form with the exception that the bacilli are found in the stools and will agglutinate with the blood serum.

*Tuberculous ulcerations.* Tuberculous ulcerations are very common complications of chronic pulmonary tuberculosis, and the diarrhea is most pronounced when the lesions are in the lower bowel. Pain is a frequent symptom, occurs in the lower abdomen, and is most severe before the passage of a stool or after taking food. Mucus is mixed with the stools and there is also usually a small quantity of blood. The finding of tubercle bacilli in the stools is of little diagnostic significance. In some cases the tuberculosis is localized about the ileocecal region, and a mass is frequently felt resembling a malignant growth. In these cases, in addition to the paroxysmal pain, diarrhea alternates with constipation.

*Syphilitic ulcerations.* Luetic ulcerations of the small bowel are very rare, the most common being in the rectum. The picture is very

characteristic; the ulcer is elevated, with indurated edges and a smooth base, and there is some stenosis of the bowel which gradually increases. A positive Wassermann reaction makes the diagnosis more certain. There is usually diarrhea, but the stools may be semi-solid; considerable amounts of mucus and sometimes shreds of tissue are found. The appearance of large amounts of blood is rather rare.

*Carcinomatous ulceration.* This may occur in any part of the colon. Symptoms of incomplete obstruction appear early and are manifested by attacks of colic associated with constipation; soon, blood or bloody stools appear from the ulceration. When the neoplasm is in the rectum there is usually a constant desire for bowel evacuation, accompanied by a discharge of gas with mucoid material. As the condition advances, ulceration appears and there is a marked diarrhea of small watery stools containing blood and mucus.

*Mucous colitis.* There are 3 theories concerning the etiology of this disease; first, that it is entirely a nervous affection and that the mucus is purely a nervous hypersecretion; second, that it is due to a catarrh of the bowel; and third, that the disease is due to both a nervous irritation and a catarrhal condition. The signs noted are frequent attacks of colicky pain in the abdomen, expulsion of mucus in the form of a membrane, and often diarrhea. The liquid movements always contain much mucus in the form of shreds, bands, or even complete casts of the bowel.

*Simple colonic infections.* Among infections of the bowel that may give rise to persistent diarrhea (not including the amebic and bacillary forms) are various microorganisms, including tapeworm, hookworm, whipworms, flukeworms, strongyloides, and various flagellate parasites. Diagnosis can usually be made by careful examination of the stools. The diarrhea usually appears suddenly and without any apparent cause; stools are evacuated with much gas, but without pain, and are alkaline, soft, contain mucus and blood, and have an ammoniacal odor.

*Intestinal obstruction and stasis.* When the obstruction is incomplete, constipation alternating with diarrhea is found. Together with



the diarrhea there is abdominal distention, colic and difficulty, and often inability, in expelling gas. As the bowel becomes almost completely blocked, dilatation is observed in the area above the obstruction and the diarrhea is increased inasmuch as only liquid stools pass the obstructed area. There are 3 well marked varieties of intestinal stasis that may give rise to persistent diarrhea. In the first the stasis is due to a dilated cecum, often in connection with a dilated colon. Because of the retention, fermentation is produced which is followed by diarrhea. In the second variety, on account of prolonged retention, the fecal masses are so channeled that the stools pass through in diarrhea form; periods of diarrhea accompanied by abdominal pain and distention are not uncommon. When the irritation extends over a long period of time, catarrhal conditions of the bowel are very common, and as a result of injury to the mucosa ulcerations may occur which further increase the tendency to diarrhea. In the third form of stasis, the diarrhea is due to a spastic condition of the bowel, giving rise to a frequent passage of small round fecal masses. The lower bowel is constantly filled with these masses, and irritability is produced with frequent desire for defecation with passage of watery stools containing mucus.

*Chronic appendicitis.* It is sufficient to mention in passing that rarely diarrhea occurs when a chronically inflamed appendix is plastered against the bowel.

*Diverticulitis involving the sigmoid and rectum; polyposis of the colon.* Diverticulitis is associated in its early stages with constipation, abdominal discomfort and a general distention from gas; after a time, however, the constipation is often alternated with diarrhea and pain becomes localized in the region of the sigmoid, producing symptoms like those of appendicitis but on the left side. The lower bowel is filled with fecal masses which give frequent desire for defecation. Multiple polyps of the colon often give rise to severe diarrhea and hemorrhages. The movements are watery and consist largely of mucus and blood.

*Lesions of the brain and spinal cord.* Diarrhea is frequently noted in cerebral hemorrhage, brain tumors, tabes, and transverse myelitis, the severity of the diarrhea varying with severity of the central involvement. The slightest pressure exerted by the patient is often followed by the passage of liquid stools; a cough or a sneeze may bring about a similar result and in some instances the movements may pass when he urinates or walks; in others he may be unaware of the bowel discharge, the stools passing unconsciously in liquid form.

*Disturbances of the glands of internal secretion.* The diarrhea in hyperthyroidism and in disease of the suprarenals has been explained by the fact that due to a disturbance in the internal secretions of the glands a hyperperistalsis is produced. As has been noted above, diseases of the pancreas produce diarrhea, the large fatty stools aiding in diagnosis.

*Diarrhea due to cardiorenal disease.* In myocardial insufficiency, diarrhea is a fairly common symptom, due to the general passive congestion of the abdominal organs. That of nephritic origin is probably due to excretion into the bowel of irritating toxins, because the severity of the diarrhea usually varies with the exacerbations of the nephritic disease. In patients suffering with chronic nephritis over a long period of time, uremic ulcers have been observed in both the small and large intestine.

*Diarrhea associated with disturbed metabolism.* Pellagra, sprue and gout are the diseases in this group often accompanied by diarrhea. In pellagra it is usually very severe and is accompanied by pain. The stools are either serous or bloody and often contain undigested food elements. In the late stages of severe cases an uncontrollable diarrhea occurs, which is a great factor in the final prostration. The diarrhea in sprue is very characteristic. At first it is accompanied by pain and tenesmus, the stools being liquid and dark; later the movements occur usually in the early part of the day and the pain and tenesmus disappear. The stool is copious, frothy and fermented, light in color and acid in reaction. Ulcerations of the colon may also play a part in the

causation. Gout is rarely complicated by diarrhea, but when it is, other gastro-intestinal symptoms may be present, such as foul breath, furred tongue, flatulence and abdominal pain.

*Cholecystectomy.* In a small percentage of cases there is a persistent diarrhea, the exact nature of which is unknown, but it is thought to be due to disturbed pancreatic secretion, since it has been found that the duodenal contents are deficient in ferments in these cases.

*Gastro-enterostomy.* Diarrhea may appear almost immediately after operation and is thought to be caused by the rapid discharge of undigested food into the bowel, setting up a mechanical irritation.

*Pyloroplasty.* The cause of the diarrhea in these cases is similar to that in gastro-enterostomy but is never as severe.

*Appendectomy.* Removal of a chronic appendix is occasionally followed by a profuse diarrhea, due most likely to some injury to the adjacent bowel occasioned by the operation.

*Resection of the bowel.* Often severe diarrhea follows this operation, and is sometimes very alarming. It is not difficult to explain if the severe nerve injury inflicted upon the intestines by the operation is borne in mind.

*Nervous influences.* These forms of diarrhea have their onset often after severe excitement, worry or shock. The trouble is caused by hypermotility of the bowel, the stimuli being either psychic or reflex or a combination of both. The psychic variety is produced by worry or shock, while the reflex form occurs as a result of stimulus like sudden chilling of the body. The onset is sudden, with gurgling sensations in the abdomen, while the patient is in good health. Between the attacks there is no discomfort and all varieties of food can be eaten without causing recurrence. An examination of the stools shows no abnormal constituents, and there is very little fermentation. On account of the increased motility, undigested food particles may be found.

## TREATMENT OF BRIGHT'S DISEASE\*

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It is my purpose to define some of the problems that arise in the treatment of Bright's disease and to indicate how and to what extent they may be solved. The conditions with which I shall deal are convulsions, uremia, dropsy and hypertension.

*Convulsions.* The convulsions of Bright's disease have been called uremic for 3 generations and believed to be due to poisoning of the brain by excess of nitrogen waste. In the last 2 decades this conception has been steadily losing ground for the following reasons:

(1) The closely similar convulsions of child-birth are now known not to be uremic. (2) Many chronic nephritics die of uremia without having had convulsions. (3) Convulsions are frequent in acute Bright's disease when there is little or no uremia.

Volhard believes, and many are in partial or complete accord with him, that most convulsions in Bright's disease are due to interference with the blood flow to the brain. This interference is thought to be brought about in 2 ways: (1) by spasm of the cerebral arterioles often superadded to a preëxistent general hypertension; (2) by edema inside the skull compressing the brain and its vessels. Volhard states, and my experience coincides, that patients with general anasarca are less liable to intracranial edema than those that have slight puffiness of the face and little dropsy elsewhere.

When there is edema inside the skull lumbar puncture often works excellently. A boy on my service with acute Bright's disease had many convulsions within a few hours, increasing in violence and threatening life. He had another while lumbar puncture was being done but no more after that. When lumbar puncture fails, venesection should be at once resorted to. In cases that seem to be due to spasm of the cerebral arterioles a prompt re-

\* (Read at the Passaic County Medical Society meeting of February 12, 1931.)



duction of blood pressure is the indication and venesection the method of choice. Chloral and a quiet room are important after either puncture or blood letting.

The great majority of convulsions can be successfully handled in this way, but I do not wish to convey the impression that we yet know just how they are caused or that retained poison is not a factor in some of them.

*Uremia.* This condition has been supposed to mean certain nervous and bodily symptoms due to poisoning by abnormal amounts of nitrogenous waste accumulated in the body through failure of the kidney to excrete them fast enough, but this primary conception has had to be modified in 2 ways: First, all the nervous symptoms are not due to nitrogenous waste, but quite a proportion result from a reduced blood supply to the brain. Hence, symptoms due to nitrogenous waste have been called "true" uremia, while those due to other causes have been called "false" uremia. It is only of the "true" uremias that I wish now to speak. Secondly, none of the known nitrogenous waste substances causes uremia when artificially introduced, so the toxic substance is yet unknown, but it occurs in quite definite proportion to those that are known. Hence, uremic symptoms hardly occur until the NPN, which is normally about 25 mg. to every 100 c.c. of blood, passes 100 mg. This figure is not absolute but is a convenient one to remember. On the other hand, uremic death hardly ever occurs below 250 mg. and may not occur till 500 and over is reached. So, while estimation of NPN is an invaluable guide, it is not an actual measure of the toxic substance itself. It is as impossible to treat a uremic intelligently without blood chemistry determination as it is to treat a cardiac irregularity without an electrocardiogram.

There are 2 main ways in which NPN increases in the blood which depend on 2 separate functions of the kidney in dealing with nitrogen waste. The separation of these functions is not sufficiently explained in most books on the subject yet an adequate understanding of the treatment of true uremia depends on proper understanding of these 2 functions and of how they interact.

In the first place, the kidney extracts urea

from the blood, and in the second place it puts the urea into the urine. As it cannot store urea in any considerable amount within its cells, the amount of urea that it can extract from the blood becomes quickly dependent on the amount it can put into the urine. Very few normal kidneys can put more than 40 gm. of urea into a liter of urine (or 4%) and the ordinary urine output is between 1 and 2 liters a day. On ordinary diet and activity a human being furnishes some 20 gm. of urea for excretion per day, so the maximum is about 3 or 4 times the normal demand, not an enormous reserve as bodily functions go.

Many people in middle life even without any manifest kidney disease cannot put over 20 to 25 gm. in a liter and it is an important fact that this power to concentrate urea in urine may weaken very rapidly under strain. By strain I mean the demand for constant maximum concentration over a period of days. On the other hand, it may recuperate as rapidly when the strain ceases.

It is evident that the way out of such a difficulty is to increase the urine volume, and this is exactly what happens in chronic nephritis when large volumes of low gravity urine are passed, the low gravity necessitating the large volume. Any condition that leads to continued low urine volume may easily lead to a rapid rise of NPN. Prolonged vomiting, so that little fluid is taken and some lost, is a classical cause. I recall a vomiting gastric ulcer patient with apparently normal kidneys whose NPN was found to be 150 mg. and dropped to normal in a week with administration of fluid by other channels.

After surgical operations postanesthetic nausea results in small intake, and a totally unsuspected uremia creeps in. About the seventh day the patients look badly and by this time it may be too late to save them. A gall-stone patient whose blood chemistry and urine were normal before operation was lost in just this way.

The way to avoid these accidents is to understand the genesis of this kind of uremia, to keep close watch of the NPN when urine volumes are low, and to begin forcing fluids before dangerous figures are reached. The ways to get the fluid in are various. The

stomach is the best route. When nausea blocks this, the duodenal tube may occasionally be used. Four ounces of tap water every 3 hours per rectum is well tolerated by some patients, the Murphy drip by others. If the rectum proves intolerant, the subcutaneous tissue may take up a lot, but is liable to get sore from repeated clysis. In children, the peritoneum has been much used. Venous infusion is a standard method. However much you put in, by any or all these channels, you must realize that you do no good unless it comes out as urine. These large amounts of fluid may act viciously in 2 ways: first, they may strain the heart, and secondly, they may simply add to edema without increasing the urine; 1½ liter of water caused edema of the lungs in one patient, but, fortunately, an immediate venesection saved him. Let me urge you not to be faint-hearted in the presence of extreme uremias of this type. There are 2 cases in my records of patients whose NPN reached 400 and yet was reduced to normal. As much as 8 liters of fluid in 24 hours have been given without doing harm.

Stimulating other channels of elimination is a method doomed to failure in this condition because no other organ can replace the kidney in this most fundamental function of getting rid of nitrogenous waste. The diminution of urine through purging and sweating is apt to do more harm by reducing urine volume than can be compensated for by the amount of nitrogen that is gotten rid of in the diarrhea and the sweat. Moreover, both these procedures when carried to emergency extremes exhaust the patient.

Blood letting is of little avail because it cannot be repeated. With an NPN of 300 mg. per 100 c.c., for instance, 500 c.c. of blood only contains 1.5 gm. of NPN; while 500 c.c. of urine contains 5-10 gm., even if the concentrating power is weak. The only way then to save these patients is by increasing urine volume, and the one best diuretic for this purpose is water in large amounts.

The second type of uremia which occurs in chronic nephritis need not detain us long because there is so little to do for it. It results from the failing power of the kidney to extract urea from the blood. The stimulus

that makes the kidney take urea from the blood is the presence of urea in the blood. As the kidney becomes less responsive this stimulus has to be increased in order to drive the kidney to excrete the daily accumulation. In this way, the NPN slowly rises, often very slowly. There is an old painter working at the hospital whose NPN has remained between 75 and 100 for the past 5 years, without causing any uremic symptoms. In his case this stimulus is enough to drive his kidney to do its work from day to day. This, however, is a dangerous situation, for as the kidney loses power the NPN must keep on rising to make it do its daily work, and finally reaches the point where the NPN accumulation in the blood and body becomes toxic and dooms the chronic nephritic to die from the adaptation which had helped him to live. The condition is a hopeless one because we know of no other stimulus that will drive a worn-out kidney to excrete enough nitrogen. We stop the ingestion of nitrogenous food but accomplish little because nitrogenous waste is formed from the body tissue, as well as from nitrogenous food, and if we give less than about 50 gm. protein, enough of the body protein to make up the balance will be used as food and we only make a bad matter worse. Reduction of protein in the food, a sufficient urine volume, occasional blood letting and glucose infusions, all delay the tragedy a little, but if the uremia is high and of the second type a fatal termination is still inevitable.

It is by no means easy to be sure of the genesis of the uremia in every case and so we always try forcing fluids if the heart will stand it, but in a late chronic nephritis with a failing hypertensive heart, extensive changes in the eye grounds, an NPN of 200, and developing uremic symptoms, the outlook is grave in spite of any treatment. Morphine should be freely used to relieve the pathetic suffering of these patients.

*Dropsy.* The normal consistency of the various tissues depends largely on the presence in them of a certain amount of water. When the tissues are dehydrated they become shrunken and firm; when they contain too much water they become swollen and soft.



When this increase in water becomes so great that an incision causes the fluid to come out in drops, the condition is called dropsy. When dropsy occurs in the walls of a serous cavity the fluid collects in the cavity, sometimes in large amounts. When it occurs in a mucous membrane the fluid exudes from the mucous surface, as into the lung, the nose or the bowel; when it occurs inside the skull, it is often produced with sufficient force to increase intracranial pressure and restrict the blood supply to the brain.

General dropsy occurs most frequently with cardiac and renal disease but its genesis is very complex. Fluid reaches the tissues only through the capillary walls, while it is drained from the tissues both through capillary walls and the lymph channels. In other words, we believe that food and oxygen are carried from the blood stream to the tissues as an aqueous solution which passes out through the capillary wall, and that carbon dioxide and waste products, similarly dissolved in water, pass from the tissues to the blood stream through the capillary walls, except for such as are exhausted through the lymph. In other words, there are 2 streams, opposite in direction, constantly flowing through the capillary walls. We do not know whether these streams occur alternately in the same capillary or if some capillaries subserve the purpose of outflow while others subserve that of intake. We do know, however, that normal tissue moisture results from a balance between the volume of outflow from the blood, and the inflow to the blood plus the lymph flow, and that dropsy is the result of a predominance of outflow over exhaust.

The factors which control this exchange of fluid between the tissues and the vessels are very imperfectly understood. I wish to mention some of them. *Salt exchange* is the chief adjuster of osmotic pressures in the body fluids; so, when salt accumulates in a tissue water regularly follows it so as to prevent a rise of osmotic pressure to a mischievous level in the tissue concerned. Widal and his followers believed that dropsy was caused by the deposit of an abnormal amount of salt in the tissues and the resulting accumulation of enough water to adjust the osmotic pressure.

They showed patients who could be made dropsical or normal by simply varying the salt in the diet, and I have seen such. They showed that extra salt caused sudden rises in body weight and vice versa. There can be no question that salt is an important factor in dropsy, but it is by no means the only one.

The *colloids* exist in the body as jellies; that is, they are combined with a certain amount of water. And the jellies which they form may be thicker or thinner; that is to say, under influences which apparently do not change the chemical structure of the colloids, the amount of water which they can bind varies considerably. Moreover, the colloids do not pass through animal membranes nearly so readily as the crystalloids. So the blood protein tends to stay in the blood stream while the salt may easily escape. Similarly, the tissue colloids stay outside the blood stream. The enthusiasts hold that blood-tissue water exchange depends on the amount and the water-binding power of the colloids inside and outside the capillary wall, and that normally the blood-water is kept inside the vessels by the water-holding power of the blood colloids. They regard the dropsies that occur when the blood proteins are reduced as due to this fact. While this whole subject is difficult, there is a strong leaning on the part of many able investigators to regard the relation between colloids and water as another important fact in water distribution within the body.

Krogh has shown that the *capillary bore* is controlled by a hitherto unknown set of contractile cells applied to the outside of the capillary walls and under the control of a separate set of vasomotor nerves. It is further known that when the capillaries are dilated the outflow through their walls becomes greater than the inflow; in other words, wide capillaries tend to "leak", and this leakage ceases when they again contract. So capillary dilatation is another factor in the production of dropsy.

*Hydrostatic pressure* rising above normal inside the capillaries favors an excess of outflow through the walls. Perhaps it does so by causing dilation. At any rate its effect is seen every day in the marked influence of gravity on the site of edema.

When capillary circulation slows below the

normal limit (*stasis*) "leakage" is favored. Perhaps it is because the capillary walls suffer reduction of their oxygen supply.

The least understood and probably the most important factor in controlling the water exchange is the *life activity* of the endothelial cells which form the walls of the capillaries. How they govern the 2 opposite currents is as unknown as how the brain cells produce thought. This factor, though unknown, must never be forgotten in considering a dropsy.

When we are faced with a dropsy it is well to bear in mind just what we wish to accomplish. First, we must induce a flow of tissue fluid into the vessels greater than the outflow from them. Then we must induce some excretory organ to pick up this extra water from the blood and eliminate it from the body. Unless both these things happen the dropsy will remain. The kidney may be stimulated but the tissue fluid fail to move; on the other hand, the kidney may fail to pick up the extra water from the running blood. It is not surprising, in view of the complexity of the problem, that the most effective treatment of dropsy is primitive and empiric rather than rational.

We can mitigate the influence of gravity by putting the patient to bed; we can foster the speed of the circulation by cardiac drugs; we can limit the supply of dropsy, forming substances by reducing the intake of salt and water; we can try to increase the blood colloid by infusions in gelatin or a protein-rich diet; we can remove some of the accumulated fluid by puncture; but when it comes to directly influencing the flow of the dropsical fluid back into the vessels, that is a harder matter.

Here, as in uremia, the one important channel of escape, besides the puncture needle, is the kidney. We see dehydration from dysentery, but I have never seen a dropsy cured by inducing a diarrhea. Free bowels help a little but not much. Similarly, I have yet to see a massive dropsy sweated out.

A French writer says that the edematous patient "urinates into his tissues"; and the problem is to make him urinate into his bladder. With this purpose in view, we give drugs which have been found by experience to in-

crease the flow of urine. Of these, the most used are the purine group, caffeine, theocin, and especially diuretin. As we all know, they often start a urine flow but fail to maintain it. The stronger ones may irritate the kidney. Like all diuretics, they work better in cardiac dropsies than in those associated with renal disease. Many of the inorganic salts have a diuretic effect, and of these the acetate and citrate of potash are most used. They do not irritate, but frequently fail. Urea is recommended as non-irritant, but it has to be given in such large doses that the stomach often rebels; 20 to 100 gm. per day is a good deal to stomach, and what experience I have had with it has not been very encouraging.

Of all diuretics there is one that stands out, and that is mercury. It may be given by mouth, as calomel, and I used to have success with Guy's pill—calomel, squill and digitalis, 1 gr. each. The new preparations, novarsurol and salyrgan for intramuscular use, are certainly remarkable in their effects; they surely influence water exchange and stimulate the kidney at the same time, but must not be used in severe or acute renal inflammation because they irritate in stimulating. They may cause stomatitis or colitis, though I understand that salyrgan very rarely produces toxic effects.

One word about puncturing dropsical legs, as all writers stress the danger of fatal infection from this procedure. When an intern, I hastened a death that way and consequently for many years have watched cardionephritics die with massive dropsies, feeling content to let them do so without trying leg puncture. Two years ago, persuaded by something I had read, I tried making a cut about  $\frac{1}{2}$  in. long in the skin on the outer side of each ankle. The patient had a huge anasarca and had to sit in a chair to breathe. Diuretics had failed utterly. The incisions were made under strict asepsis and dressings were changed with as much ease as if the wound were into the peritoneum or into a joint. He drained 1 to 3 liters a day through these wounds, and after the legs began to shrink a copious urine flow began spontaneously and the dropsy completely disappeared. Subsequent attempts have caused no infection, so I have become a convert. If you try it, remember the risk, and carry out



the strictest asepsis till the wounds are completely healed.

*Hypertension.* The immediate genesis of hypertension is easier to understand than that of dropsy, but its treatment, in general, is less successful. Hydrostatic pressure of the blood within the arterial tree depends on 3 varying factors: the volume that is in the tree, volume that is being pumped in, and volume that is escaping. The arterial tree is a reservoir with elastic walls and the fuller the reservoir the greater the pressure exerted on the contained blood. This reservoir has one inflow from the heart and many outflows through the arterioles. The blood coming in tends to distend its walls and so raise the hydrostatic pressure of its fluid contents. The blood that escapes allows the walls to shrink and so lowers the hydrostatic pressure of contained fluid. The relation of inflow to outflow then determines the pressure. Reduction of inflow regularly lowers pressure; we see this every day in failure of the heart. Reduction of outflow causes increase of pressure.

Normally, blood supply of the various organs is constantly increased or decreased, according to their changing needs, by dilatation and constriction of the arterioles through which blood must reach them. Yet this constant shifting is accomplished, except in conditions of unusual activity, without any significant departure from normal blood pressure. If, however, the average tonus of all the arterioles rises the total capacity of their myriad openings becomes less and outflow from the tree as a whole is reduced. This results in a rise of blood pressure, and is the predominant cause of blood pressure as we meet it clinically.

The cause of this increase of average tonus is not well known. One of the theories about it is that it is a beneficial adaptation for insuring the necessary blood supply to vital organs when their vessels have become narrow through sclerosis, and therefore no attempt to reduce it should be made. The kidney requires more blood in proportion to its size than almost any other organ in the body. When we look, after death, at a kidney whose arteries are so sclerosed that their bore is re-

duced to perhaps  $\frac{1}{4}$  normal size, and consider the possibility if their dilatation is precluded, it is not hard to believe that the blood flow to all the rest of the body must have been restricted through arteriole contraction in order to insure the kidney its proper share of blood. In many other cases we find no such basis at autopsy for explaining the purpose of the increased pressure which had existed during life. That hypertension shortens life, chiefly through heart failure and apoplexy, there is no question; it also limits the functional power of the patient while he lives. The higher the pressure the more trouble it makes. When it falls, as the result of rest or any other indirect cause, the patient is regularly benefited. When it is reduced by direct treatment, even over short intervals, the patients are benefited. Perhaps when we get more potent remedies to lower it we shall find cases with sclerosed kidney arteries in which we may do harm by trying to reduce it too much. In the present state of our knowledge, however, I think we are justified in always trying to reduce it to as near normal as we can.

A good deal of sanity is required in handling hypertension cases. The condition is of bad prognosis, and yet patients carry it for years without apparent damage. I recall 2 patients, 1 still under observation, who have had pressures well over 225 for 10 years without any symptoms, without retinal changes and without any pronounced enlargement of the heart as seen by x-rays. So, it is bad practice to talk too much of its dangers. Then again it is always difficult to fail gracefully. After telling the patient that he is fortunate to have consulted us in time, and trying one plan after another with no success, it is a little awkward to say that his pressure had better not be reduced, as it is a beneficial provision of nature in his case. I quite understand the psychology of physicians who feel that this is one of the times when it is best for the patient not to know the full truth.

If we look dispassionately over the list of methods for reducing blood pressure, this fact stands out; there are many effective methods of reducing it, but not one method that can be thoroughly relied on to keep it down. The

one certain way to reduce it in a crisis is venesection. This reduces the volume of blood in the arterial tree and if enough blood is let the pressure is bound to fall. The blood volume is so quickly restored, however, that the pressure often rises to its former level within 24 hours and the procedure cannot be often repeated. Some clinicians bleed plethoric hypertension patients every month or so and report benefit, but this use of the method can hardly prove generally helpful. Rest, sweating, sedatives, arterial dilators, all help temporarily, but when ordinary activities are resumed the pressure is apt to come back.

When we turn to examine the question of more prolonged effects we find that potassium iodide, the reliance of the former generation, has failed to prove its effectiveness and is no longer thought to hold the blood pressure at a lower level than it would be if the potassium iodide were not taken. Chloral and aconite work in some cases, but for a time only. Good reports of liver extract and watermelon seed have been recently published, but these remedies are still in the experimental stage. A mode of life which permanently removes the strain and effort is quite effective for considerable periods, but it is impossible to permanently reduce the strain of life enough in most of our patients to significantly reduce the blood pressure. There is only one method that has worked for me and that is the salt-free diet. Salt privation is recommended more or less generally in dropsy, but regarded as useless in hypertension by most competent observers. My experience with it in hypertension has been so convincing that I wish to discuss it with you at some length, not only in relation to hypertension but also in regard to dropsy and inflammation of the kidney.

The salt-free diet was suggested by Vidal and Javal, about 1900, as a result of their work on salt and dropsy. After trying it, the French also believed that salt irritated an inflamed kidney and that it caused increase of blood pressure, so they recommended salt privation in these conditions also. Salt is a threshold body; that is, it is only taken from the blood by the kidney and put into the urine when its percentage in the blood rises above a certain figure, known as the threshold point.

This threshold point is about 0.55% or about 5.5 gm. in a liter. There is reason to believe that this threshold may move up and down. If salt is excluded from the diet and large quantities of water are drunk and voided, a urine without any salt is produced, while the salt in the blood remains at the threshold point. So, a salt-free diet simply removes the excess of salt; it does not deprive the body and blood of salt. Another point to remember is that salt is neither formed nor destroyed in the body to any considerable extent, so that the output approximately equals the intake and we are not faced with the difficulty met with in uremia, where taking protein out of the diet cannot prevent the accumulation of nitrogen waste in the body.

Dropsy cases react very differently to the salt ration. There are cases of massive dropsy that will completely disappear within a few days on salt privation and will reappear as promptly when salt is again given. These dropsies, in ordinary language, are due to salt and can be cured by taking salt away. Unfortunately, they are the rare exceptions. A great many dropsies can be made definitely worse by excess of salt in the diet and can be made a little better by salt privation. Some severe dropsies are not at all reduced by salt privation. We do not try to make them worse by giving it, but there is evidence that salt may increase the dropsy in such cases. It is, therefore, proper to reduce the salt intake to a minimum in every dropsy.

Salt is the basis of all good seasoning and the salt-free diet is so insipid to some patients that it interferes with their taking enough to eat. When salt privation is doing no apparent good and tasteless food is causing a loss of nutrition, enough salt should be given to make the food palatable.

In hypertension, many good observers have tried salt privation and report that it yields no results; among them Munk, Lichtwitz in Germany, Christian in Boston, and many competent men in this city. Others have had success with it. It is difficult to understand these completely opposed views. As I am an advocate and in the minority, let me state my experiences and leave judgment to you.

There are many cases on my office records



of patients in middle life who have come with pressures between 200 and 240, who have been put on a salt-free diet without any medication and without any modification of their modes of life, and who have returned to the office in a week or two with pressures of 140 to 160. This fall in pressure has been maintained for many of them as long as they have consented to follow the strict diet. I have similar records of hospital cases, but their rest in bed and other treatment might easily have produced the result, and the follow-up has been much less accurate. There is 1 case of a school teacher who had a blood pressure of 220 for 3 years, who was then put on a salt-free diet and whose pressure has remained around 160 for 10 years. On occasions she breaks over the diet restrictions and the pressure rises, only to fall again when the strict diet is resumed. There are other records of patients whose pressure has been only slightly reduced, and there are many records of cases in which the salt-free diet has not reduced the pressure at all. It is my impression that in nearly  $\frac{1}{2}$  the cases of hypertension, as they occur in office practice, a notable reduction can be attained by this plan. In the advanced nephritics in the hospital wards it yields much less.

There is perhaps a reason why some clinicians have found it futile, and that is the salt has not been sufficiently restricted. Salt privation will usually not affect blood pressure until the diet contains less than 2 gm. per day, and in some cases not until the salt intake falls below 1 gm. In hospital work, diet errors often creep in. As the salt output approximates the intake an excellent and easy check is to determine the amount of salt in the 24 hr. urine. Even in private practice it is surprising how often salt outputs above 2 gm. are found in patients who intend to coöperate in every way. I believe that many clinicians who doubt the efficiency of the salt-free diet have not instituted such checks. Perhaps another reason for its disrepute is because many clinicians have tried it first on advanced ward patients, and, obtaining no results, have hesitated to force its discomfort on their private patients.

The French writers believe that salt is a

kidney irritant and so avoid an excess of it in acute renal inflammation. Many authors follow this restriction, probably because edema also is apt to occur in such cases.

My belief in the salt-free diet was deeply rooted by the following case: A man, 30 years old, was admitted to the hospital June 5, 1923. He had scarlet in childhood. Had a bad sore throat during the previous January. On February 13, 1923, he went to bed with a little dropsy, right hydrothorax, and obstinate nausea and vomiting, which latter persisted till his admission. His urine contained some albumin. On February 18 he had 6 *convulsions* and was delirious. On April 24 he had 7 *convulsions*, and following these his sight failed till he was totally blind by May 5. On May 1 his NPN was 37 mg. The family money was exhausted and he was sent to the hospital to die.

On examination, he was emaciated, very sick and totally blind. The eye-grounds showed a mass of hemorrhages and patches and the disc outlines were completely lost. Blood pressure was 200/140. The heart was large, with a diffuse apex beat, accentuated second aortic, and an apical systolic murmur. The urine contained a heavy trace of albumin and some casts. There was no edema. He was not anemic. NPN was 51 mg. He was put on a salt-free diet and 2 tests of his 24 hr. urine showed 1.9 gm. and 1.3 gm. respectively. *No other treatment*, except nursing, was tried. In a week he began to improve. By June 18 he was out of bed. On July 21 he was discharged. He could then read the headlines, all his other symptoms were gone, the eye-grounds looked remarkably better, his NPN was 39 mg., he had gained about 20 lb. weight and his blood pressure was 148/95. I kept track of him until the end of 1926, when he left the city for business reasons. He went to work Jan. 1, 1924. During the following 3 years he worked hard and was well. His eye-grounds healed so completely that the surprised eye specialist, who had seen him in the hospital, pronounced them practically normal. His sight was normal and blood pressure remained near 140/90. Urine continued to show a trace of albumin and a few casts. NPN was 40

mg. at his last visit. Weight rose to 158 lb. He remained on a salt-poor diet.

I am sure if any one reports a similar case treated only with watermelon seed or liver extract it will cause quite a stir. So you must not blame me if I remain an advocate of the salt-free diet in certain cases of hypertension and nephritis.

In conclusion, I ask you, then, to distinguish between 2 kinds of uremia and to treat that which results from failing concentration with large amounts of water, to try lumbar puncture and venesection in convulsions, to always think of the capillaries in cases of dropsy, and to give the salt-free diet a fair trial in hypertension.

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### **CIRCULATORY DISTURBANCES IN THE EXTREMITIES OF DIABETICS; THEIR RECOGNITION\***

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Diabetes mellitus has been given in the past 10 years considerable thought and attention by the medical profession. This has stimulated scientific research and has resulted in one of the best and most valuable gifts to mankind—*insulin*—the pancreatic extract developed by Banting and his co-workers. With the advent of insulin, we became privileged to witness the solution of some of the most difficult problems presented by diabetes: (a) diabetic coma, always before a potent factor in the diabetic mortality rate; (b) juvenile diabetes, dooming its sufferer to a brief 2-3 year life span (a group now proudly, and justly so, spoken of by Joslin as his "10 years' club"); (c) surgery in diabetes. To all diabetics insulin has brought the boon of a lengthened life span, we know, but what medical pitfalls may be waiting in these prolonged years for the patient still remains to be investigated. If the continuous course of the diabetic condition persists, what complications

may be expected and how may they perhaps be averted by our vigilance?

The cardiovascular system claims first place in any investigation of this kind. The importance of giving priority to this system is obvious; first, the notorious influence worked by diabetes in producing changes in the walls of the arteries; second, the prevalence of coronary disease in diabetics; and third, the increase in complications of the extremities attributable to impaired circulation, the most important of such complications being gangrene.

Gangrene has long challenged medical science, not only because it is said to be responsible for more deaths than any single factor, but also because it has the baffling faculty of developing while the patient is under medical observation and treatment. It seems logical, then, to direct our investigation so as to determine whether or not this complication is preventable. To accomplish this we must first have some understanding of the development and pathology of atheromatosis and arteriosclerosis and their relationship to diabetes mellitus. The next step should be the ability to recognize early these pathologic changes in the circulation so as to be prepared to check further progress and prevent the subsequent effects which invariably follow. Our problems, therefore, are: (1) how do atheromatosis and arteriosclerosis develop and what influence does diabetes have upon these conditions; (2) what are the signs and symptoms of impaired circulation in the extremities.

The first problem is to determine what influences are at work in the development of atheromatosis and arteriosclerosis, and numerous contributions have appeared in the literature upon this subject. Time and space do not permit going into a detailed discussion of these pathologic changes. Among the various explanations offered, Aschoff's "imbibition" theory has received most favorable comment. The increase of lipoids, particularly cholesterol, in the blood predisposes to changes in the intimal ground substance. As the process develops, the intima itself becomes involved. Subsequently, atheromatous plaques make their appearance. Later, chemical changes of

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\* (Presented at the Monmouth County Medical Society meeting, January 28, 1931.)



the cholesterol esters with calcium salts may take place, resulting in the calcific deposits seen in arteriosclerosis. Added to these influences, the hyperglycemia and acidosis in diabetes must also be considered. Warren mentions the "possible influence of a high sugar concentration in producing swelling of the intimal ground substance through changes in osmotic pressure". Joslin comments upon the rôle played by hyperglycemia and also acidosis in the production of atheromatosis. Is it surprising that the diabetic individual is prone to develop sclerotic changes in the arteries? The frequency of atherosclerosis in diabetes is now an accepted fact. It may be demonstrated even in the young diabetic, particularly after a period of 5 years; this phase of the subject has been recently discussed by Shepardson.

The next problem is early recognition of vessels that have undergone pathologic changes. When this is accomplished, then detection of potential gangrene is possible. Information can be gathered in 2 ways; (a) by a careful history, particularly for symptoms which may lead us to suspect impairment of circulation, and a thorough physical examination of the extremities; (b) confirmatory tests which may throw some light upon the condition of the arteries and capillaries.

Pathologic changes in the arteries naturally affect the normal distribution of blood to the extremities, resulting in trophic disturbances and also a lowered resistance of tissues against infection. Manifestations of disturbance in circulation will depend upon such factors as the type of vascular pathology, such as atheromatosis, arteriosclerosis, thrombo-angiitis obliterans or embolic; the extent and duration of the impaired circulation and the degree of success in establishing a collateral circulation.

Regardless of the type of pathologic change in the vessels, the method of approach in studying these cases is practically the same. The history should yield information as to whether or not the patient complains of claudication, cramps in the calves of the legs, coldness in the feet, numbness and pains. A history of trophic ulcers or focal gangrene may be significant.

Examination of the extremities is exceed-

ingly important, and in a vast majority of cases this method alone may permit diagnosis of a definitely impaired circulation. The following signs should be observed: pallor when the feet are in the reclining position, and particularly so if it exists when the feet are in the dependent posture; rubor and cyanosis, when the feet are dependent should likewise be observed; diminution or absence of the dorsalis pedis pulsation; sclerosis of the dorsalis pedis artery; coldness of the parts and a variety of lesions which will be discussed subsequently. These lesions were described in detail in a previous publication as "early or warning signs of impending gangrene". Briefly, they include rose spots, scars, pigmented areas, blebs, ulcerations and small areas of focal gangrene. The rose spots are small, pink, or erythematous, areas usually seen on the legs and sometimes on the feet; they are not numerous, and are not unlike the rose spot seen in typhoid fever. They are presumably due to some pathologic changes in the minute vessels and seem to indicate recent activity. They may last for weeks. Ultimately, they change to pigmented areas and in time are replaced by small scars. Scars are frequently seen on the legs in these cases of impaired circulation. The large oval or elliptic scars are often attributed to injuries or bruises. This may be so but it is questionable whether all of these scars may be so explained. Not infrequently patients are unable to say exactly when or how they were bruised and there may be scars over the soft parts which do not bruise so easily. They may be the expression of insidious atrophic changes of the tissues supplied by small vessels which are slowly but progressively undergoing occlusion. There are smaller scars which merit some consideration; they have a punched-out appearance and look like the pock marks of smallpox; they are not numerous and are usually seen over the legs and sometimes on the dorsum of the foot; they may be later developments of the rose spots mentioned above.

Bullas may be found on the toes or on the feet. On one occasion they were observed on the fingers. They vary in size from 1 to 3 cm., usually develop over night and may

have been preceded by a burning sensation. As a rule, they are painless, not surrounded by an inflammatory area, and have a tendency to become purple in color and be followed by local gangrene. These blebs are most likely due to a recent and more or less rapid occlusion of the smaller vessels. They are not commonly found but when they do exist, are highly significant and may be looked upon as forerunners of gangrene. This fact has been observed in practically every case where the bullas were seen.

Other lesions, such as ulcerations, infections on a small scale, trophic disturbances and focal gangrene need not be discussed; they should be recognized without difficulty even in hasty examinations.

Various laboratory methods have been suggested for studying the condition of the arteries and capillaries. It is true that a careful observer may be able to recognize pathologic changes in the vessels by a thorough examination. This may apply to well developed conditions. However, in patients who do not present sufficient symptoms and signs, the laboratory may help greatly in confirming or detecting evidences of impaired circulation. Among the tests may be mentioned: (1) calorimetric studies, including skin temperature readings and heat loss in the extremities; (2) the oscillogram; (3) skin reactions to histamin; (4) Roentgen rays; (5) intradermal wheal test; (6) intraarterial injection of opaque solutions followed immediately by roentgenography; (7) capillary microscopy. It is not my intention to discuss the technic of these measures in this presentation. Studies of the extremities and an attempt to evaluate the different methods are being carried out and will be published in the near future, but I will briefly mention some of the benefits which may be expected from the more practical tests such as the oscillogram, the histamin test, skin temperature and Roentgen rays.

The oscillogram, modified by Pachon, is an instrument based on the principles of the sphygmomanometer. Readings of the thigh, leg and foot will give us some idea as to the condition of the larger vessels. Zero readings of the thigh and legs are significant and in-

dicate that there is a diminution of the circulation, and particularly point to the larger vessels. Zero readings need not indicate that gangrene exists.

Skin reactions to histamin have been studied by Lewis, and its clinical application, particularly in diabetes, has been discussed by Starr. By studying the wheal formation and local erythematous reaction of the skin following the inoculation of histamin acid phosphate, one may gather facts concerning the condition of the capillaries and the smaller vessels in the extremities.

Of the calorimetric studies, the skin or surface temperature test is the most feasible. Some interesting contributions by Brown, Allen and Mahorner, and by Scott, indicate that this method of study is reliable. It not only informs us as to the condition of the vasomotor system in the region studied but may also throw some light upon the condition of the larger arteries.

Roentgen rays are helpful by revealing calcific changes in the larger arteries. This information, unfortunately, is limited and may give a false impression of the exact state of affairs. Despite sclerotic changes in the main arterial branches, it is quite possible that a sufficient collateral circulation has been established; thereby maintaining a fairly satisfactory state of nutrition of the parts.

The methods of study described above may all have their limitations. One need not rely solely on any single test. When employed with the idea of confirming suspicions of impaired circulation, after a thorough and complete examination, they undoubtedly will prove their usefulness. If used routinely, in some cases they will point out deficiency in blood supply where the impaired circulation might have been overlooked.

The discussion thus far has been more or less limited to the understanding and recognition of impaired circulation. A word now concerning other disturbances of the extremities in diabetes, among which may be mentioned phlebitis, infection and gangrene.

*Phlebitis* has received little consideration. Thrombophlebitis does occur but it is doubtful whether the incidence is any higher than in nondiabetics.



*Infection* is included in the discussion of circulatory disturbances for 2 reasons: first, because of the well known fact that impaired circulation lowers resistance of the tissues supplied by the damaged vessels; and second, because infection often precedes the development of gangrene. Another fact worth mentioning is that infection may be deep seated and easily overlooked. This applies particularly to the feet. It is not uncommon to find a deep cellulitis in the foot either independent of or associated with osteomyelitis of one of the metatarsals. This type of infection almost invariably is followed by a local gangrenous process, or gangrene of one or more toes may appear.

*Gangrene* is easily recognized by examination of the extremities. Various forms of gangrene may be observed, such as the arteriosclerotic type, thrombo-angiitis obliterans, obliterative endarteritis, embolic and the so-called "diabetic gangrene". Since the topic of this presentation concerns itself chiefly with the understanding and recognition of circulatory disturbances of the extremities, a discussion of the different types of gangrene is intentionally avoided. Detailed descriptions and differential diagnoses may be found in any text-book on gangrene or diseases of the circulatory system.

Gangrene usually appears late in the course of diabetes. It is the end-result of changes in the walls of the arteries. Individuals past middle age and who have had diabetes for 5 years or more are liable to develop this complication. Infection, either local or deep seated, may produce gangrene in any stage of the disease. Since gangrene is a later development of vascular changes, is it not possible to prevent it? This can only be accomplished by the early detection of vascular changes and impaired circulation by the various methods of study described above. After recognition of the underlying pathology, measures should be taken to correct the diet, having in mind not only the hyperglycemia but the lipoids and the cholesterol content as well. It is exceedingly important to control the diabetic condition. Other preventive measures may be directed toward improvement of the condition of the vessels by systematic foot exercises and

diathermy. Incidentally, these patients should be warned that they are potential cases of gangrene, that the utmost care should be given to the feet, that trauma and infections are to be guarded against, and that only the fullest coöperation may ward off the most dreaded of all complications, *gangrene*.

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## COMMON DISEASES OF THE ORAL MUCOSA\*

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A routine examination of the oral cavity for abnormalities should be made as a part of every physical examination in any branch of medicine. This applies particularly to the specialty of dermatology and syphilology. Our predecessors in medicine recognized the value of close observation of the tongue and gained many helpful ideas from that part of their examination.

Diseases of the skin are often preceded by or associated with definite clinical evidence of the same pathologic entity within the oral and nasal mucosa. This relationship can be explained by the fact that the skin and the mucous membrane of the nose and the mouth is derived from a common embryologic source—the ectoderm. Also some diseases affecting the general constitution very frequently have their prodromal symptoms within the oral cavity. This is evidenced by the Koplik spots of measles, the pharyngeal congestion of scarlet fever, and the ulcerations of agranulocytic angina. The appearance of a few discrete miliary tubercles may be the first clinical evidence of tuberculosis and a persistent but mild stomatitis associated with burning of the tongue may antedate the blood picture of pernicious anemia. Certain oral lesions may occur as part of the menstrual cycle and pregnancy. Vicarious bleeding from the gums with submucous hemorrhages, aphthous stomatitis, herpes, salivation and toothache, may appear coincident with the menstrual period.

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\* (Read before the Middlesex Dental Society, New Brunswick, N. J., November 1930.)

Gingivitis and alterations in the teeth are seen at times in pregnancy. Urticaria, angio-neurotic edema and purpura may involve the mucous membrane of the nose and mouth. The usually fatal disease, pemphigus, may begin in the mouth in the form of bullas which quickly change to erosions and ulcerations; diagnosis would be influenced by age of the patient, subsequent skin eruption and the gradual deterioration in health.

The diagnosis of certain diseases of the skin is often facilitated or proved by examination of the mouth for similar lesions; modified in the mouth in appearance and structure because of the moisture and resulting maceration. Irritation from the teeth and from food alter the appearance of lesions, and very frequently secondary infection occurs. The surface of papules may be covered with a membrane, and vesicles and bullas are usually seen as simple erosions. However, there are certain oral conditions the appearance of which may be sufficient to make a diagnosis; for instance, certain benign and some of the malignant tumors. Grouping and distribution of lesions in the mouth are less distinctive than on the skin and a complete examination of the entire skin may be necessary in order to find an eruption associated with the lesions in the mouth. The oral lesions of lichen planus are often mistaken for leukoplakia but if the characteristic flat-topped, shiny, violaceous papules are present on the skin, for example, of the fore-arms and glans penis, the diagnosis is complete. The mucous patches of secondary syphilis may be confused with aphthous stomatitis, erythema multiforme and other local affections but they can be differentiated by an examination of the entire skin. Oral lesions produced by the ingestion of drugs are usually difficult to diagnose unless concomitant skin lesions are present or a history is obtained of taking the suspected drugs.

There are some drugs which have a predilection for the oral cavity as a site of eruption, such as the antisyphilitics (mercury, bismuth, arsphenamin), the barbitol group (including veronal and luminal), the antipyretics (antipyrin, acetanilid, phenacetin and pyramidon), the salicylates and the phenolphthalein compounds. Poor dental hygiene, complicated

by bacterial infection, plays a predominating part in the production of a stomatitis.

*Mercury.* Stomatitis due to mercury begins usually with edema and intense lividity of the gums in conjunction with excessive flow of saliva and pain on closing the jaws. This may continue until the tongue, tonsils, soft palate and pharynx are affected, with formation of a necrotic membrane. Toleration to mercury can be increased by rigid dental hygiene.

*Arsphenamin.* Stomatitis caused by arsphenamin may be due to an idiosyncrasy rather than an overdosage. It may or may not occur in conjunction with a dermatitis. The lips, tongue and buccal mucosa are dry, hot and red, in contradistinction to stomatitis due to mercury. There is usually a decreased flow of saliva.

*Bismuth.* Thirty to 40% of patients had stomatitis from bismuth in the first year of its use. It is not as prevalent as formerly, because of decreased dosage and longer intervals between treatments. It is usually characterized by bluish or bluish black pigmentary deposits along the free border of the gingiva and which spread until the entire gum is involved; and stomatitis similar to that caused by mercury occurs if the drug is continued. The pigmentation remains for months and will reappear rapidly if the drug is again used.

*Antipyrin group.* This includes antipyrin, acetanilid, phenacetin, pyramidon and others. These drugs are very prone to cause an eruption of the buccal membranes and the genitalia. The eruption may vary from a simple congestion of the pharynx and edema of the lips to the formation of vesicles and bullas followed by erosions and deep ulcerations. In patients addicted to the use of acetanilid a pronounced cyanosis of the lips and the buccal mucosa is caused by the production of methemoglobin.

*Barbitol group.* The lesions in the oral cavity vary from a mild redness and edema to the formation of vesicles and bullas with consequent ulcerations and erosions. Lesions produced by this group cannot be distinguished clinically from those produced by the antipyrin and phenolphthalein groups.

*Salicylates.* May cause a vesicular or bul-



lous eruption of the oral mucosa and the lips, and at the same time erosive lesions of the glans penis may occur. Shelmire mentions the occurrence of extensive ulcerations of the tongue and soft palate following intravenous injection of sodium salicylate for the treatment of rheumatism. In another case reported by him vesiculation and erosion of the lower lip occurred following intravenous use of salicylates.

*Phenolphthalein.* Eruptions of the mouth, lips and the genitalia are frequently observed following ingestion of phenolphthalein as a laxative; usually seen on the lips in the form of vesicles with varying amounts of edema of the parts. Ruptured vesicles in the form of erosions and ulcerations may be present on the tongue and other parts of the oral cavity. At the same time there may be an erythematous, urticarial or bullous eruption of the skin which results in various sized violaceous, pigmentary plaques. This pigmentation may last for some time and will show acute exacerbations following the second ingestion of the drug. However, some cases may show a period, the so-called refractive period, during which the idiosyncrasy to the drug has diminished or entirely disappeared.

*Ulceromembranous stomatitis.* Vincent's angina has been more prevalent since the World War. Foerster predicted that Vincent's disease would be an important factor in the differential diagnosis of lesions of the mouth after return of the troops. McKenstry called attention to an increase in number of these cases in England and Canada among former troops and civilians, and history of trench mouth while in the army can be obtained from some of the patients. Vincent's disease must be differentiated from stomatitis due to mercury, diphtheria, and mucous patches of syphilis. It may occur on the tonsil, as a superficial or deep ulceration partially covered with a dirty gray membrane, with some enlargement of neighboring lymph-glands; on the ramus of the lower jaw posterior to the last molar tooth, as a localized abscess; as a general mouth infection involving the entire mucosa, pharynx and tongue; or it may be confined to the gums where it often has its primary source and may be confused with pyorrhea

alveolaris. Vincent's disease may also produce an ulceration of the vulva, a conjunctivitis, or an ulcerating balanitis. Thomas and Klapproth recently reported a case of Vincent's infection of the ear following the bite of a human, and they had previously reported 2 cases following bites of humans with infection on the fingers. In all cases the characteristic odor, membrane formation, and sloughing was present. The spirillum of Vincent and the fusiform bacillus can be demonstrated by smears or by dark-field preparations.

Arsenic, in the form of Fowler's solution in glycerite of tannin, applied locally, has been used with benefit in some cases. Arsphenamin and neo-arsphenamin locally and intravenously has been the treatment of choice for many years. Applications of 2% chromic acid and paste of sodium perborate have been used with success. Bismuth intramuscularly may be of benefit.

*Aphthous stomatitis.* Aphthous stomatitis is an acute inflammatory affection occurring mostly in children. It may be part of a gastro-intestinal upset or due to faulty dental hygiene. Small vesicles with an inflammatory areola appear on the gums, the inner surface of the lower lip or the buccal mucosa, which soon become shallow ulcers covered with superficial gray exudate, and they are sensitive and painful. Applications of 10% silver nitrate, with a mouth wash of potassium chlorate or boric acid, are usually sufficient to heal the ulcers. Existing gastro-intestinal disturbances usually require treatment.

*Superficial and deep yeast infections.* Yeast organisms are found normally in scrapings from the mouth and are therefore of little significance unless obtained after the areas involved have been cleansed, dried and painted with tincture of iodine, and bits of the membrane removed for microscopic examination and culture. The most common superficial yeast infections are thrush, macroglossia and macrochilia mycotica caused by the monilia organisms.

*Thrush or white mouth* is usually seen in nursing infants and consists clinically of a superficial stomatitis and gingivitis; usually

confined to the oral cavity, particularly the cheeks, hard palate and margins of the tongue, but may spread to the skin of the child and the nipples of the nursing mother. It is caused by the *oidium albicans* which is carried to the infant's mouth through the medium of the mother's breasts or of feeding utensils. There are usually not any clinical changes in the surrounding mucous membrane. Diagnosis is readily made by appearance of the lesions and microscopic examination of a bit of the membrane which has been macerated in 20% sodium hydroxide. The infection readily yields to swabbing of the lesions with boric acid solution, followed by application of 1% gentian violet or 2% ferric chloride solution.

*Perleche* is seen at the oral commissures in the form of whitish opaque patches which have a mother-of-pearl tinge. Small transverse fissures appear later, showing a reddened base when the lip is stretched. It is contagious and is frequently seen in epidemic form. In adults, the upper lip droops at the angles of the mouth in such way as to form an intertriginous area, an exaggeration of the normal fold. Finnerud has recently reported a series of 100 cases of *perleche* which he found to be mycotic in origin. *Perleche* simulates the split or hypertrophic, syphilitic papule seen in the same location, or it may be confused with the late ulcerating lesions of syphilis. It is best treated by application of 10% silver nitrate solution.

*Macroglossia mycetica*. Castellani and others have reported cases in which the tongue was greatly enlarged, occasionally painful, and presenting various sized, elevated, white plaques which resembled a beginning leukoplakia. Various types of the yeast organism were isolated from these cases. The infection may invade other parts of the oral cavity, as in the cases reported by Shelmire; 2 cases in which the buccal mucosa, entire gums, palate and the vermilion borders of the lips, were covered with hypertrophic whitish growth, and he compared the appearance to a diffuse map-like leukoplakia. Cultures from the membrane revealed a pure monilia, and his cases proved extremely recalcitrant to various therapeutic measures. Cauterization healed the involved

areas temporarily. Iodides by mouth and Lugol's solution intravenously were of temporary benefit.

*Actinomyces* usually begins through the medium of a carious tooth or an abrasion of the gum. Pea to egg sized nodules appear first on the cheeks or tongue; later break down, and yellow granules or ray fungus can usually be easily demonstrated from the discharge.

*Blastomycosis* is a distinct rarity. Shelmire, in 1928, reported a case of blastomycosis in the oral cavity. The lesion was confined to the lower gum and consisted of a sharply defined verrucous mass which filled the lower labial vestibule. Several sinuses exuding pus extended down into the tumor. The histologic diagnosis was a granuloma of unknown origin. Blastomyces were demonstrated by smear and culture. Extensive ulceration of the lower jaw followed, with multiple sinuses opening on the cheek, chin and neck. Death occurred within a few months.

*Sporotrichosis* may involve the mucous membrane of the mouth and form abscesses with severe ulceration. It must be differentiated from syphilis and tuberculosis.

*Tumors*. Almost every benign tumor of the human body may have its counterpart within the oral cavity, such as tumors of the vascular system, fibromas, lipomas, neuromas, muscle tumors and dermoids. Tumors derived from the dental system, such as adamantinomas, epulides, odontomas and various cysts may be found solely in the oral cavity.

*Angioma* is a rather frequent tumor of the oral cavity and is usually situated on the lips, buccal mucosa and tongue. Angiomas consist of the embryonic type of tissue in contradistinction to the fixed or adult type seen in *nevus flammeus*, which explains their marked response to radium. They usually remain stationary in size, while lymphangiomas, which may be differentiated by the various sized vesicles filled with lymph, usually have a tendency to continual extension and enlargement. A capillary *nevus*, or *nevus flammeus*, of the face may extend into the mouth, invading the inner surface of the cheeks, gums and palate. Venous *nevi* occur usually on the anterior portion of the tongue; their color is



bluish and the size of the tumor can be temporarily reduced by pressure. Simple telangiectasis may occur anywhere in the mouth. Simple varices may be seen under the anterior portion of the tongue; and the blood blister of the lip in the aged.

Angiomas yield to various therapeutic measures, such as radium, coagulation, carbon dioxide snow or excision. The method of choice depends on location and size of the tumor.

*Papilloma.* This benign tumor is frequently seen on the dorsum of the tongue, the gums and lips. It may vary in size from that of a match head to that of a pea; is elevated, and usually has a verrucous surface. Distinction must be made from a malignancy. It can be snared off with a cutting current and a microscopic examination made.

*Mucous retention cysts.* Cysts of this type are seen frequently on the lower lip and may be the result of trauma. They vary in size from that of a pin-head to that of a hazel nut; are pale, translucent and contain a clear viscid substance. Recurrence after excision is usual. Desiccation is the best means of permanently curing the condition.

*Carcinoma* is often engrafted on a long standing process such as gumma, leukoplakia or fissures. Jagged teeth, irritation from excessive cigar or pipe smoking and chewing, or senile and seborrheic keratoses of the lips may be the offenders; more common in males; may begin anywhere in the mouth but the lower lip, tongue and buccal mucosa are the areas most frequently attacked. On the lips and within the oral cavity the squamous or prickle cell carcinoma is the type invariably found. Basal cell epithelioma of the lip is usually an extension from the adjacent cutaneous surface and is seldom encountered. Early recognition of a malignancy of the oral cavity is of paramount importance since metastasis occurs early because of the abundant blood and lymph supply. Carcinoma may commence as a papillomatous elevation which later infiltrates the surrounding mucosa and ulcerates, or it may develop from a fissure, and palpation will reveal an infiltration in the surrounding mucosa. In its in-

ciency the diagnosis may be difficult. Early biopsy, which is best accomplished by the cutting current, should be done and the section examined microscopically. A positive Wassermann should be kept in mind. Tuberculosis and actinomycosis must be ruled out.

Superficial, localized carcinoma of the lip responds favorably to radiotherapy. The lesion may be destroyed by electrothermic methods followed by use of radium plaques not only to the destroyed areas but the surrounding tissue. If the lesion shows an area of infiltration, gold radon seeds should be planted deeply, in conjunction with the surface application. Carcinoma arising from a leukoplakia of the lip is best treated by a wide removal of the involved area with the cutting current, followed by the use of radium. Tongue lesions may be treated by excision with the high frequency knife followed by radon implantations or by interstitial irradiation with gold radon seeds implanted permanently in the tumor area and also across the base of the tongue in order to block the draining lymphatics. Prophylactic exposures of filtered Roentgen rays should always be given to the lymphatics draining the lips and the oral cavity.

*Lichen planus* occurs in the oral cavity in approximately 50% of cases associated with the typical skin lesions. Lichen planus also appears on the vaginal or urethral mucosa and the glans penis and if there are lesions in the above locations in association with the oral lesions a diagnosis of syphilis might be suggested. Therefore, an understanding of the clinical appearance of the oral lesions is of importance to rule out leukoplakia and syphilis, which are the conditions most often confused with lichen planus. The most frequent site of the eruption is the posterior surface of the buccal mucosa, usually along the line of the closed teeth. A few gray, miliary papules only may be present but the typical and the usual eruption seen consists of an irregularly outlined network of fine white lines. The older the process, the more do the papules coalesce and form circinate plaques which resemble mucosa to which silver nitrate has been applied. The lesions seen on

the dorsum of the tongue are usually in the form of oval plaques or stripe-like plaques. On the margins, solitary papules may be present. The oral lesions of lichen planus do not degenerate, erode or ulcerate, nor are they followed by malignant changes.

Lichen planus simulates the mucous patches of syphilis and leukoplakia and, to complicate the diagnosis further, it responds to anti-luetic remedies. Fordyce said: "Leukokeratosis in patients who are not smokers, and with a negative luetic history, should suggest the probability of lichen planus and further evidence of that affection sought for."

*Leukoplakia* is the most common of the oral keratoses and is often part of an old luetic process. However, there are some cases based on excessive smoking, irritation from rough and carious teeth, alcohol and highly spiced foods. The condition is seen more frequently in males. The most frequent locations are the lips, anterior portion of the tongue and the anterior portion of the buccal mucosa just within the oral commissures in the form of a triangle. Its recognition is important owing to its tendency to degenerate into a squamous celled carcinoma. The proportion of leukoplakias which result in carcinoma has been variously estimated from 20 to 50%. It is not always possible to say from observation whether or not a leukoplakia is based on a syphilitic condition, unless there is an associated glossitis and smooth atrophy. The mucosa primarily assumes a blanched grayish or whitish tint with effacement of the papillas and furrows. The areas involved may gradually merge, forming a thick white plaque which is densely adherent and cannot be removed by scraping. These plaques may be fissured or more rarely present a verrucous appearance. There are no subjective symptoms, as a rule, except a feeling of dryness and roughness, unless fissures are present to cause pain. Squamous celled carcinoma may arise from a leukoplakia.

Treatment of leukoplakia consists of rigid and constant oral hygiene and the removal of irritating foods. The use of tobacco and alcohol is interdicted. If syphilis is the cause, the patient should secure injections of mer-

cury, bismuth and iodides. Caution should be employed with the use of arsphenamin because arsenic causes epithelial proliferation and may be the provocative factor in the beginning of a carcinoma. In cases which do not respond to the above measures, and where the process is extending, the entire area should be destroyed by electrocoagulation.

*Tuberculosis* of the oral cavity or lips is usually secondary to tuberculosis of the viscera or lupus of the skin. It is most commonly seen on the free border of the lips, the tip and border of the tongue, and the soft palate. Small, yellowish nodules appear, ranging in size from a pin-head to a lentil. Superficial or deep ulcers may result, sensitive to pressure and painful on talking or eating. The ulcers are round or linear in outline, their border is abrupt and often undermined, and the floor is covered with a loose yellowish crust. The surrounding area is not indurated nor inflamed but tubercles may be seen which have not reached the stage of ulceration. On the dorsum of the tongue a linear or fissured ulcer is the most characteristic form of lesion. The process is usually prolonged for weeks or months, with some attempt at and signs of healing. Syphilis and epithelioma must be differentiated by means of the microscope and other laboratory examinations. Radium therapy or destruction of the lesions by electrocoagulation will usually cure the condition provided there are no active foci in the lungs or elsewhere.

*Lupus erythematosus* attacks the mucous membrane in about 25% of cases showing cutaneous involvement. The lips, buccal mucosa and soft palate are the areas most frequently invaded. In the early stages, the involved mucosa is intensively red, inflamed and edematous, and differentiation from other acute inflammatory processes cannot be made unless cutaneous manifestations of the disease are present. Later, the center of the lesions becomes depressed, eroded and the surface is covered with adherent yellowish membrane. The inflammation gradually subsides and is replaced by scarring and atrophy. In addition to erosion, the lips may be covered with adherent dry scales. The oral lesions of



lupus erythematosus do not respond to intravenous gold therapy as readily as do the cutaneous lesions. The beta rays of radium, the actual cautery, and desiccation can be used with good results.

*Syphilis* may attack the oral mucous membrane without any other visible evidence of the disease. Chancre of the lip should be suspected in any indurated lesion which has submaxillary or submental glandular enlargement. Chancre of the tonsil is difficult to diagnose and differentiate from Vincent's disease unless other concomitant symptoms are present. Mucous patches which are analogous to the macular and papular skin eruption changed by moisture and maceration vary in form from a distinct redness to definite erosions and ulcerations. They are seen most frequently on the tongue, gums and soft palate. The ulcerations are usually covered with a thin diphtheroid membrane and may be confused with the conditions enumerated previously.

General examination of the skin will differentiate a great many of these conditions; in conjunction with appropriate laboratory examinations. Darkfield examination should be done but caution must be exercised in order to not confuse the *Spirocheta pallida* with *Spirocheta microdentium* and refringens. However, an interstitial glossitis, with a leukoplakia and a smooth atrophy of the tongue, is diagnostic of syphilis. The sharply defined, punched out ulcerations of the hard and soft palate, which produce perforations of these parts, can be clinically ascribed to syphilis, although some of these are due to tuberculosis and to Vincent's infection.

The presence of infiltrated ulcerations and fissures in the lips and around the oral commissures of emaciated infants is symptomatic of congenital syphilis. These fissures frequently result in linear scars or rhagades which are seen in older children and are usually associated with other signs of syphilis such as a saddle nose, keratitis, perforation of the hard and the soft palate, glossitis and changes in the teeth. The alterations in the teeth are caused by nutritional disturbances from intra-uterine infection of the

fetus, not to a direct action of the spirochetes on the tooth.

*Lingua geographica*. Erythema migrans, or the so-called wandering rash of the tongue, is of interest because of its clinical appearance and unknown etiology. It appears on any portion of the tongue as sharply defined, oval, red areas with a yellowish gray, slightly elevated border, which spreads peripherally forming red patches. The appearance and location change from day to day. It does not cause any symptoms and most patients are unaware of its presence. X-ray therapy has been of benefit in some cases.

*Moellers glossitis* may be confused with lingua geographica. It occurs mostly in middle-aged women of neurotic temperament. The tip, edges and dorsum of the tongue are the parts most commonly affected but at times the inside of the lips, cheeks, hard and soft palate is involved. The patient complains of severe pain made worse by eating. Examination discloses sharply defined patches, intensely red in color, in which the filiform papillas are thinned or absent and the surface epithelium denuded. The condition is recalcitrant to treatment. Removal of infected teeth and treatment of infected gums should be done routinely.

*Scrotal tongue*. Lingua plicata is usually a congenital and often a familial anomaly. The mucous membrane of the tongue is plicated and resembles the scrotum in appearance. The condition is permanent and does not cause any subjective symptoms. Detritus may accumulate in the deeper fissures and result in irritation, consequently the tongue should be kept clean with an alkaline mouth wash.

*Herpes* of the lips is seen frequently, while herpes of the oral cavity is rare; that of the lips is prone to recur. The characteristic grouped cluster of clear vesicles on an erythematous base follow varying degrees of pain and burning. The vesicles soon rupture and the eroded areas may be confused with mucous patches. Herpes is seen frequently in association with certain general infections, such as malaria, cerebrospinal meningitis and pneumonia. Some cases may be caused by infection within the oral cavity, such as infected

teeth, tonsils and sinuses. The contents of herpetic vesicles have been inoculated on the scarified cornea of the rabbit, following which an encephalitis developed similar to encephalitis lethargica. X-ray therapy has been of benefit in the cases which recur in the same location. Arsenic has been used with some success. Other cases have been benefited by vaccination with smallpox virus.

*Eczema* may attack the lips primarily or secondarily from the skin. Varying degrees of redness, scaling, crusting and fissuring may be present. The circumoral eczema seen in children is caused by the habit of moistening the lips and adjacent skin with the tongue, in conjunction with exposure to cold and wind. Tooth pastes, cosmetics and mouth washes may cause an orbicular eczema in a susceptible individual. The cause should be ascertained, if possible, and a protective salve such as Lassar's paste used. Fissures may be touched with 10% silver nitrate. In obstinate cases fractional weekly doses of x-rays are indicated.

Among other, but far less common conditions of the buccal mucosa, should be listed leprosy, mycosis fungoides, the lymphogranulomas, Kaposi's sarcoma, foot-and-mouth disease, pellagra, rhinoscleroma and lead poisoning.

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### DIABETES MELLITUS AND THROMBO-ANGIITIS OBLITERANS IN THE SAME PATIENT

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The association of diabetes mellitus and thrombo-angiitis obliterans has been noted before in the literature. (Adams S.F., Med. Clin., N. A., Vol. 14, No. 3.) The association of these 2 definite pathologic entities has a very serious significance for any patient because of the difficulties encountered in attempting to heal a pedal lesion. In this patient, a spot of gangrene did develop on the foot and only after prolonged and persistent effort was it not only kept from spreading but made to heal. The lesion appeared on the

sole of the right foot. Determinations of the pulse of the feet and legs showed that the lesion was on the best foot. The circulation was decidedly worse in the left leg and, in all probability, had this gangrenous spot developed on the left leg it would never have been arrested. I believe the prognosis is now good because of the progress made so far, and certainly every precaution will now be observed to allow no further trauma to occur to either extremity.

This patient, J. B., white, aged 65, was admitted to the Atlantic City Hospital on December 28, 1930. His father died at 93 years of age from senility, and his mother at the age of 49 years from heart trouble. He had 2 brothers, both of whom were diabetics; 1 is dead and the other living.

The patient had measles and diphtheria in childhood and rheumatism 44 years ago. He stated that he was well until 15 years ago, when he developed a diverticulitis for which he was rushed to a New York Hospital for an emergency laparotomy, and as a consequence developed peritonitis, fecal fistula and secondary operations covering many weeks. It was at the time of his entrance into this hospital that his diabetes was discovered. When he was ready to get out of bed, following this, he developed phlebitis in his left leg, which kept him hospitalized for many more weeks. The phlebitis finally cleared up. However, for a long time before this he had what was called "fallen arches" with tiredness in his feet and legs after walking short distances. Arch supports and other appliances were made without relief.

After recovery from his operation and phlebitis, he found that after walking about 1 city block he would have cramp-like pains in the calves of his legs, so bad that he would have to stop and rest. He now can only walk half a block before he must stop. Ever since, he has had intermittent claudication.

All his adult life he has been a heavy smoker. At the time of his operation he smoked about 15 cigars a day. At that time he consulted Dr. Leo Berger, of New York, who advised cutting down his smoking, graduated



exercises, etc. Since then he limits himself to 3 cigars a day.

He had been on a moderately strict diet, with some lapses, having very infrequent blood sugar determinations made. He never was given insulin. Examines his own urine. A week before being seen by me he attempted to shave callus from the sole of his right foot, and later a dark spot appeared which was painful to touch. This, in the course of a week, developed into a spot of superficial gangrene.

On admission patient was a thin but well nourished male. General examination, aside from an incisional hernia and spot of gangrene 2 cm. in diameter on sole of right foot, was negative. Both feet were cold and purplish-blue when patient was erect.

During his stay in the hospital his temperature ranged from 97° to 98.3° F.; pulse 60 to 100 and respirations 16 to 22. Blood count was normal; no increase in leukocytes. Repeated urinalyses at first showed less than 0.5 mgm. sugar, trace of albumin and few hyalin casts, and later all specimens were free of albumin, sugar and casts.

On admission his blood sugar was 168 mgm. per 100 c.c. of blood, and on a diet of 60 gm. carbohydrates, 100 gm. protein and 130 gm. fat, his blood sugar varied between 117.5 mgm. and 90 mgm. per 100 c.c. of blood. Blood urea was 35 mgm. per 100 c.c. of blood. Radiogram showed heart and aorta on the whole slightly enlarged. The aorta showed no calcification. Transverse diameter of chest 26 cm.; heart 13.5 cm.; and aorta 2.75 cm.

The patient was treated by rest in bed with a cradle over foot holding a blue incandescent lamp to keep feet warm and dry. He was given daily diathermy. Attention to bowels and general hygiene was observed. At first the gangrenous spot tended to spread and there was a light serosanguineous oozing. After 2 weeks the spot became entirely dry and very slowly separated and scaled off.

As determined by the oscillometer, the circulation in both legs was very poor; less excursion of the indicator on the left than right. Only above the middle-third of the thighs were the pulsations nearly normal. Had the

trauma and resulting gangrene occurred to the left instead of the right foot, the patient would, in all probability, have lost the limb.

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## REVIEW OF RECENT LITERATURE ON THROMBO-ANGIITIS OBLITERANS WITH REPORT OF AN ADVANCED CASE\*

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This is a review of the recent literature to call your attention to this important topic so that an early diagnosis can be made possible, thereby giving us a means of instituting non-operative measures and avoiding the disastrous results which follow when recognized too late; as will be illustrated by the case to be presented.

This is a disease which has been taken out of the confused material of arterial diseases by Buerger. It is a characteristic inflammatory lesion of the deeper arteries and veins of the extremities, with extensive thrombosis followed by organization and canalization, thus matting the arteries, veins and nerves into dense connective tissue cords. The arteries and veins of the lower extremities are the most frequently affected and their nerves are included in this inflammatory process, with accompanying migratory phlebitis in about 25% of the cases.

Etiology: Confusion still exists as to actual cause of the disease. Various theories have been advanced, without definite conclusion.

(1) Race. The Hebrew seems to be the most affected, especially among Russians, Galicians and Roumanians. It used to be a disease considered typical of the Jewish race but from recent reports many Gentiles have been found to be afflicted. Cases have also been reported in the Orient. Buerger reports, in his book, that out of a series of 500 cases, 10 were Gentiles. However, from more recent reports by Allen, Brown, and others, the

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\*(Read before the Monthly Conference of the Monmouth Memorial Hospital November 12, 1930.)

total number of Gentiles recorded is around 100.

(2) Sex. This disease has a peculiar affinity for the males. Females are rarely affected. Of the same 500 patients seen by Buerger, only 3 were females. If, as it seems to Silbert, who will be mentioned later, tobacco is a causative factor, the recent fad of women smoking should add to the number of that sex afflicted.

(3) Age. The ages range from 20 to 40 years.

(4) Infection. Buerger thoroughly believes that the underlying arteritis is caused by an infectious agent which may be a specific organism, although he is unable yet to prove this bacteriologically. In a recent paper he further tries to prove that the disease is caused by an infectious agent; a series of experiments carried out on normal and affected individuals and on experimental animals. He made a coagulum of an infected vessel and injected it into and around veins which were ligated proximally and distally, and in a period of 10 days removed the veins and made microscopic slides of them. The pathologic picture of the removed veins which had the perivascular coat injected was almost identical with the migratory phlebitis which is so frequently present in this disease.

(5) Tobacco poisoning. Silbert is convinced that the etiologic background for this disease is intoxication from tobacco smoking, and that everyone who gives up smoking shows a marked improvement. He claims further that there is an hereditary factor that makes these victims susceptible to some intoxicant from the tobacco. This factor he believes is influenced by the endocrine system. Many authorities agree and others disagree with Silbert as to tobacco being of such great importance in this disease, but one cannot cast aside the impression derived from case reports of the patients becoming improved as a result of refraining from smoking.

(6) Other theories have been advanced, none of which has any background and will not be discussed here. The diet of the Hebrew has been considered of importance in the etiology.

Symptomatology: Most of the symptoms are due to the thrombotic healing rather than the inflammatory lesions.

(1) We have phlebitis migrans accompanying the superficial veins in 25% of cases which may affect the lower or upper extremities; the deep veins are affected in 40% of the cases. An attack of such a nature without obvious cause should make one suspicious and lead to a thorough investigation of the blood vessels. However, if such a condition exists in the arms, careful search should be made of the lower extremities as regards the deep vessels.

(2) Pain. This consists, first, of pain of an acute inflammatory nature, which is a vague ache, deep seated and independent of accompanying paroxysms and tenderness in the calves; second, pain of the intermittent claudication type which is manifested by cramp-like or lancinating pain in the muscles of the calves or a diffuse ache throughout the leg coming on with exertion and ceasing with rest; third, pain accompanying or preceding trophic lesions, which is most frightful. A small fissure, bleb, or ulcer may be the site of the most agonizing type of pain and usually is the precursor of gangrene.

(3) Ischemia is a pallor or blanching obtained by raising the limb. Persistence of pallor when the extremity is in the horizontal or dependent position is suggestive of an early gangrene in that region.

(4) Erythromelia is a hyperemia and is almost always present. It is a purplish discoloration of varying intensity, which begins in the toe and gradually extends upward. There are 2 types: first, the induced type, brought on only by elevation of the limb; second, the chronic type, which is present while the extremity is kept in any position between horizontal and the dependent, at room temperature.

(5) Obliteration of the pulse. This is commonly seen in the dorsalis pedis artery, next the posterior tibial, the popliteal, more rarely the femoral, radial or ulnar, and occasionally the digital or interossei. Superficial obliteration of the vessel is easily felt but one must bear in mind that the deep vessels which are



obliterated are not so easily accessible to palpation. One must remember also that Buerger's disease can be present even though the arteries have not been obliterated. In 5% of the cases seen at the Mayo Clinic the pulsations of the dorsalis pedis and tibial arteries were seen and occlusion involved mostly the interossei and digital arteries. Constam, of the Mayo Clinic, reports that in 24 out of 94 cases involvement of the vessels was seen in the upper extremities. In most of the cases, however, the lower extremities are affected and then the upper. Allen has reported cases in which he found the radial and ulnar arteries only slightly diminished in their beats but found the interossei and digital vessels of the hand definitely affected.

(6) Trophic changes as seen only late in the disease; due to the fact that the disease affects young people who are able to develop good collateral circulation. However, due to slight trauma, fissure, pustule or bleb, we may have an increase in pain and the development of gangrene.

(7) Interesting is the fact that people suffering with thrombo-angiitis obliterans show some coronary changes, some of them being of the same pathologic process that goes on in the extremities. The most important vessel involved is the left coronary. It is, rather surprising that very few autopsies have been performed in Buerger's disease. This is probably due to the fact that a pathologic diagnosis was made from the amputated leg, and the rather generally accepted idea that only vessels of the extremities were affected. In his book, Buerger reports 4 autopsies, 3 of which showed coronary changes, the pathologic picture being similar to that of the extremities. The cases reported by Perla and 1 by Lemann with autopsy findings showed similar coronary changes.

It would be an interesting point to obtain electrocardiograms of every person afflicted with thrombo-angiitis obliterans to note the relation of coronary changes in this disease. Having this in mind, many more cases of coronary disease would show changes similar or identical pathologically to the vessels in the extremities.

(8) The usual laboratory examinations in this disease show nothing characteristic. Removal of a vein showing migratory phlebitis may make possible an early diagnosis. Many authorities claim that there is an increase in the number of red blood cells, platelets and hemoglobin in this disease. Still others believe that there is a hyperglycemia.

Differential diagnosis. About 90% of the cases can be divided according to Brown's classification into vasomotor and organic groups, by the presence or absence of the pulsations of the arteries that are usually palpable. However, 30% of the cases of thrombo-angiitis obliterans show vasomotor disturbances, and one must remember that gangrene may develop in this disease even when pulsations of the vessels are felt, because in these vessels the obliteration takes place distally to the area of palpation. In other cases there is much difficulty encountered, and confusion exists as to differentiation of vasomotor thrombosis and organic changes in the vessels. This may be particularly true in cases where upper extremities are involved. A satisfactory classification has not yet been given for diseases of the blood vessels. Buerger has attempted to divide them into 2 types: first, those of vasomotor disturbances which include Raynaud's disease, erythromelalgia; and second, organic, such as arteriosclerotic changes in the vessels, thrombo-angiitis obliterans, etc. Peri-arteritis nodosa must also be included in the second group. Early in the disease the occurrence of indefinite pains leads one to the diagnosis of rheumatism, neuritis, gout or flat feet. The following are the most important diseases which may be confused in the beginning with thrombo-angiitis obliterans:

(1) Erythromelalgia. Arterial circulation here is bounding and stronger during the attack, redness is paroxysmal—disappears on deep pressure and returns quickly. No ischemia is present and pain is brought on by pressure but there is no intermittent claudication. Trophic lesions are very rare, gangrene is of the Raynaud's type, and the vessels pulsate. Females as well as males, and all races are equally affected, and this is a symmetric lesion.

(2) Raynaud's disease. About 70% of these cases are in women; the upper extremities being mostly involved. The lesion is symmetric, with attacks of local syncope, asphyxia and rubor. The veins are not pulseless, and redness does not disappear on raising the limb. Intermittent claudication and phlebitis are absent. The x-rays show atrophy of the terminal phalanges.

(3) Arteriosclerosis. This occurs usually in older people, blanching and rubor are not so regularly present, arteriosclerotic gangrene is of the moist type, and its occurrence in the upper extremities is rare. X-rays may show calcified arteries and they are distinctive here. However, one must remember that arteriosclerosis may be superimposed upon a Buerger's disease.

Treatment. The impression that the disease finally ends in amputation is combated by Silbert, who holds the optimistic view that the disease can be checked by proper and newer therapeutic measures, whereas the earlier treatment resulted usually in that 85% of the cases came to amputation. Spontaneous improvement has occurred but as the patient is further watched he is bound to have a relapse which within a few months may lead to gangrene.

Silbert has studied 258 cases that were untreated and found that 77% of 155 cases required, within 5 years, amputation of one extremity. In another series of 200 cases treated under a single method he claims that in a period of 1-5½ years only 10% of the cases came to amputation, and of these some were far advanced when they first appeared for treatment. He goes on to say confidently that if cases are recognized early, amputation will become a rarity. Prognosis under treatment depends greatly upon the circulatory deficiency, and palpation cannot determine that, so he resorts to the Pachon oscillometer and can thus early detect cases. With this method we have 2 distinct major groups: first, those having an oscillometric reading of ½ or more at the ankle of the affected extremity, with an excellent prognosis; second, those having a reading of zero or less than ½ in advanced cases, and if gangrene is present amputation is

inevitable. Of course, prognosis depends upon the collateral circulation being sufficient to maintain nutrition.

Various methods have been advanced as to treatment, the most important of which will be taken up:

(1) The use of hypertonic salt solution, which consists of a 5% salt solution in distilled water. The *modus operandi* is claimed by Silbert to be a mechanical one in that it increases the blood volume, by repeated injections, of the collateral circulation; this results in a dilatation of the existing vascular channels and the opening up of new capillary channels. No specific effect of the salt is expected and salt is used because it is least toxic. His first dose is 150 c.c. and subsequent doses 300 c.c. At least 7-10 minutes are allowed for each injection, and they are given 3 times a week and reduced as improvement takes place. The only effects at the time of injection are a sense of warmth and thirst, accompanied by flushing of the face or engorgement of the veins. It takes at least 48 hours to excrete 15 gm. of salt and that is why only 3 injections are given a week. A febrile reaction indicates a foreign protein in the salt; usually the resultant of bacterial growth. Repeated injections have caused a certain amount of destruction of red cells, but the patients have an increase in the blood elements and Silbert thinks it is of no consequence. Cardiac or renal impairment in a patient over 60 years of age is a contraindication to its use. Silbert has given somewhere around 13,000 injections without any fatality. He claims that improvement may be seen within a few weeks and the first sign is an increase in the warmth of the affected part of the extremity with subsequent decrease of pain. Most gratifying, are results obtained in early cases. We thus have an increase in temperature, growth of nails, later healing of the ulcer. In addition to these injections, rest in bed, hot foot baths, baking, diathermy and exercises recommended by Buerger are given.

(2) Typhoid vaccine. Injections are given as advocated by Allen and Smith. This raises the temperature from 1 to 2° and is believed



by some to be just as beneficial as some of the surgical procedures recommended.

(3) Insulin injections have been advocated. No final statement can be made as to its value, as not enough cases have been reported to show its benefit, and the theory is very definite. Perhaps the question of a hyperglycemia may have some foundation. Insulin injections of from 10-15 units are given 2 to 3 times a day and may be of value in helping pain. However, it should be preceded by a glass of orange juice to combat any hypoglycemic reactions that may arise.

(4) Peri-arterial sympathectomy, as advocated by Leriche and others, has been tried with some success. Considering the anatomy of the sympathetic system, and especially that supplying the blood vessels, it will be plainly seen that this form of operation is a waste of time. The operation as advocated by Hunter and Royle is that ramisection has been of value but not enough cases have been reported to have any final say about it. Ganglionectomy has also been performed, some claiming success, others refuting it. A similar method has been tried by exposure of ganglion to Roentgen rays with temporary relief only. However, all these operations are temporary in effect and just as good results can be obtained by nonoperative means.

(5) Surgical treatment. Of course, conservatism is uppermost in these cases and operations should be deferred as long as possible to allow nature to form a collateral circulation. Silbert believes that nature should be given a chance to allow circulation to form and often nature performs a spontaneous amputation of the gangrenous toe. A major operation should be done only in the face of rapidly spreading gangrene even though in the presence of infection and ascending lymphangitis. Silbert treats his cases with simple drainage and wet dressings, with some good results. Trauma and infection must be guarded against. Unfortunately, some patients come too late, but even here he believes that a trial of salt solution should be made. Silbert advocates amputation below the knee because an artificial leg functions much better with a natural knee-joint; however, ac-

cording to Harvey and Oughterson, if there is evidence of a possible arteriosclerosis superimposed on this disease it is better to amputate above the knee.

*Case History.* M. R., white, male, Hebrew, American, 31 years of age, married, with no occupation for the past 5 years, entered the hospital October 17, 1930, complaining of severe backache and severe pain in the right wrist.

For the past 3 weeks, he had experienced sharp, stabbing pains in the lower back, which radiated to the front and into the groin on the left side, lasting 6 or 7 hours and not easily relieved by opiates. No nausea or vomiting accompanied the pains. The latter are intermittent, occur almost every day, are of the same nature and almost always double him up. At the time of these attacks he has had difficulty in starting his stream when voiding but with no polyuria, frequency or hematuria. He claims to have passed a stone from the bladder 7 years ago and one 4 years ago when he had similar attacks but they were not as severe as now. For the past 7 years he has had a dull aching pain in his back, which was constantly present but was not severe enough to alarm him. Also complains of sharp, stabbing, cramp-like pain across his right wrist-joint shooting along the ulnar side so that at times he does not feel the presence of his fingers at all. These attacks occur almost every other day, at times twice a day, and he is rarely free from them for more than a week. They come on with such severity that they drive him to the "verge of suicide". At times he has "pins and needles" sensation in the tips of his fingers and during such attacks the right hand becomes very pale, taking a long time to return to its normal color, and being colder than its fellow. This has occurred intermittently for the past 8 months.

About 12 years ago, while a member of the 27th Aërial Pursuit Group, A.E.F., in France, both feet became numb and cold. Later he had "pins and needles" sensation, and the army medical man told him he had frost-bitten feet and a touch of rheumatism. From that time on he suffered with pain in both

legs but more so with the right, and the least exposure to cold caused him great suffering. He had these attacks for 8 years, being seen by various medical men who diagnosed it "rheumatism", "flat feet", "neuritis", etc., without any help to his condition. Four years ago the pain became unbearable in his right leg and he was unable to stand on that foot. He was recommended to Dr. Buerger with a diagnosis of "thrombo-angiitis obliterans". He was hospitalized, given intravenous saline, Buerger's exercises, etc., without satisfactory betterment. An amputation just above the knee was performed by Dr. Buerger.

Five weeks later the patient fell and hurt his stump, resulting in a tumor formation which later discharged a seropurulent material and showed no signs of healing. He was sent to the Brooklyn Naval Hospital where a second amputation was performed 3 in. above the first and good healing resulted.

The patient went around on crutches for a period of 3 years. In the meantime, his left leg began to bother him and he experienced the same symptoms as in the right leg. He was unable to walk a block without getting cramp-like pains in his left leg. One year later he went to the Brooklyn Naval Hospital where he received intravenous typhoid vaccine. He developed a severe reaction from the treatment, necessitating the use of adrenalin. At the same time he experienced a tingling sensation of the right hand. The toes on his left foot felt like "ice" and at other times "hot". He developed an abrasion on the left big toe, and one on the second toe which increased the pain. He was sent to the Marine Hospital at Key West, Fla., where he had a partial amputation of the anterior-third of the left foot. He again experienced very sharp pain in his leg so that an amputation of his left leg between the hip and thigh was performed at the St. Francis Hospital, December 14, 1929, where he made a good recovery.

Past history: Had measles and whooping cough.

Habits: Nothing unusual except that he smoked about 40 cigarettes per day and since the onset of new pains he smokes even more.

There is nothing unusual in the family history. His occupation was that of a painter since boyhood. However, since loss of both extremities he does not do anything.

Previous hospitalization: Entered Monmouth Memorial Hospital February 27, 1927, complaining of pain in the right leg. A diagnosis of "plumbism" was made and also Buerger's disease was suspected. Entered again August 15, 1927, complaining of intermittent sharp pains in both feet. Diagnosis was "acute foot strain". He was in again on November 22, 1927, complaining of the same pain. Definite rubor changes were seen in the right leg and foot as compared to the left. Diagnosis--Buerger's disease. On July 9, 1930, he entered the hospital with both legs amputated and complaining of sharp stabbing pain in the left groin with a lump in scrotum. Diagnosis—thrombosis of left spermatic veins, probably of same nature as that of the legs. He returned 3 days later with acute pain as on July 9, which has radiated to the left lower quadrant, with spasm and tenderness of the left rectus muscle. In the last 3 admissions he complained of severe pain in the right hand and wrist.

Progress: The patient was in the hospital fully 3 weeks. The pain in the left kidney area disappeared within a week. However, the intermittent claudication of the right hand became progressively worse. The attacks were agonizing, driving him to threats of suicide. Almost a grain of morphia would not hold him. Everything in the line of palliative means failed to help. Insulin was tried without avail. Persuaded to refrain from smoking.

When the patient was discharged, one of our physicians called 3 or 4 times a week, and patient was no better; is now in Florida, thinking that the climate would be of benefit to him.

Summary: We are dealing here with a disease which is almost in the last stages of thrombo-angiitis obliterans. Here is a patient who had the disease almost 9 years before it was recognized and when it was diagnosed it was too late for nonoperative treat-



ment. This proves the great difficulty of recognizing the condition in its early stages unless we bear in mind possibility of the disease in people who complain of pain in the legs or hands. It also teaches us not to make a diagnosis of "flat feet" or "foot strain" unless we have ruled out Buerger's disease.

When presenting the patient at the conference, he complained of severe pain in the left cubital fossa. On examination he showed a definite migratory phlebitis of the median cubital vein extending for about 4 in. with palpable nodosities along the newly inflamed vein. At the same time he had intermittent claudication of the left hand.

It would be interesting if one could determine the cause of his pain in the left lower back, which was so typical in the history of renal colic or stone. Are we dealing here

with some thrombotic process in the left renal vein? Was it a migratory phlebitis of that vein? Radiographs of the kidneys were negative. In view of these negative findings one would be inclined to think that this is a part of the general disease which has attacked so many other vessels.

Another interesting thing is his intermittent pain in the precordium. Here again one would be led to the idea that the coronary vessels are a part of the same thrombotic picture seen elsewhere, in view of the extensive involvement in the other parts of the body. Neither an electrocardiogram nor physical findings of coronary involvement are positive. Only microscopically can it be proved to be thrombo-angiitis obliterans. Nevertheless, coronary involvement is to be thought of in people suffering with Buerger's disease.

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## THE BELL BUOY

Ralph S. Cone, M.D.

Rising and falling  
With the swell,  
The bell buoy tolls  
A funeral knell,  
Ringing ceaselessly,  
O'er the shoal;  
Peace to the unknown  
Sailor's soul!

Rumbling upon  
Thy lonely shores  
Like the wind  
In the chimney roars;

Sad one, watching  
By the sea,  
What could the cruel  
Waves tell to thee!

But merrily,  
Mockingly, they rave  
And the bell buoy tolls  
O'er the wanderer's grave.  
Doth absence make  
Thy love grow fonder?  
Wild heart, be still,  
He waits thee yonder!

## Economics

### FAMILY DOCTOR'S INCOME IN RELATION TO PREVENTIVE MEDICINE

(Editorial from the Wisconsin Medical Journal, March 1930, part of which was taken from the American Journal of Public Health, January 1930.)

From time to time the question is raised as to what effect the extensive program of preventive medicine that is developing in many parts of the country will have on the income of the practicing physicians. The falling death and morbidity rates in all parts of the country compel recognition of the fact that this question has other than academic significance. Thinking persons realize that the practice of medicine is no more a static condition than any other human relationship. In the evolution of social adjustments, the means and mechanism of furnishing necessary human service must be modified to meet changing conditions. The shrewd horse trader long ago sold his livery stable and bought a garage. The physicians of the kerosene era obtained a large part of their income from the treatment of diphtheria and infantile diarrhea. While preventive medicine has reduced the physician's income from both these sources almost to the vanishing point, the physician of the gasoline age has more practice of a far better kind.

Mathematic demonstration of this statement may be presented with available figures. The last year for which figures on diphtheria rates of the various states of this country are obtainable is 1927. In that year there were 82 cases of diphtheria reported in the state of Michigan for each 100,000 population. A comparison of incomes to the physicians between fees received for treatment of cases and those paid for immunization of babies reveals that even where the disease has the above unusual prevalence, preventive medicine is as productive financially as curative medicine. The income from treating 82 cases at \$50 each would be \$4100. Among each 100,000 population in the state of Michigan in 1927, there were 2200 babies born. If each of these babies had been immunized at only \$3 each, the income from this practice in 100,000 population would have been \$6600. It is also to be noted that these data predicate only the immunization of the new-born, or an equivalent number of persons in the community. There are of course 4 times as many preschool children as babies, and 10 times as many school children. The opportunity for increasing practice by carrying on immuniza-

tion among the preschool and school population in the physician's clientèle offers an almost unlimited field.

I had occasion to visit the dentist the other day. Because I had postponed the visit too long, some of the necessary repair hurt a good bit more than as though it had been done earlier; and, the bill was larger. When I was dismissed, the doctor asked: "Would you like to be placed on the 4 months' list?"

He then explained that people forget about inspections and the dentist until the night that toothache awakens them, and said that the "4 months' list" meant that at the end of each fourth month his assistant would call for an appointment,—and call repeatedly until I did come in. I, like 75 other patients of that particular dentist, was pleased with the suggestion.

If that pleases the patient of the family dentist, why should it not please the patient of the family physician? I venture to suggest that it would.

### ARE WE UNDERPAID?

(An article by Dr. H. M. Tolleson in Medical Economics, February 1931.)

There is much ado about the doctor's fee, methods of collecting, and like problems. Here is a thought not so much discussed in the meetings of our medical societies and in the editorial columns of our journals:

There is one way in which a doctor, a real physician, is paid that isn't entered on his ledger. There is one form of compensation that doesn't come under the income tax report.

Have you, Brother Physician, ever experienced the feeling of satisfaction and gratification that comes like warm sunshine permeating the drab, sordid grind of the day's work from the sight of a helpless infant gradually growing stronger under your care?

Has your heart been touched and your eyes moistened as a mother looks up at you with a glowing face as she holds a baby who is recovering from the brutal attack of disease, recovering as a result of your timely intervention?

Do you recall that night when you sat beside the patient as he passed his crisis and the anxious little wife and bewildered little children looked up to you and put all their trust and faith in you? And then, when you could safely say, "He is out of danger, Mrs. Brown"—do you recall that look, that "Thank God—and the Doctor!"? Did you collect a fee? Whether you did or not, Doctor, were you underpaid?



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

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## ASBURY PARK CONVENTION

The 165th Annual Meeting of our venerable State Society, held at Asbury Park, June 2-5, was no less interesting than the many similar previously held conventions of this organization. Good weather conditions prevailed throughout the week, and proximity to the larger centers of population embraced in the counties of Essex, Hudson, Mercer, Middlesex, Morris, Passaic, and Union, favored an increase of attendance. The total registration did not, however, reach the high figures established in Atlantic City—only 890 in all as compared to 1065, and 310 members exclusive of delegates and officers as against 459—but the percentage of elected delegates present (80%) was unusually large. Only 2 Fellows and 3 Trustees were absent. There were, however, 2 attendance drawbacks to the success of the meeting: many of the registrants from the northern portion of the state drove by automobile from and back to their homes the same day, merely "looking in" upon the convention; and, several of the southern counties were very poorly represented (3 without representation at the meeting of the Nominating Committee) because of the inaccessibility of Asbury Park by railroad.

The figures at hand do not enable us to calculate the effect upon attendance resulting from abolition of the Permanent Delegates, but we are inclined to think it was less than had been feared. Two years ago, we editorially expressed the belief that "the old dependables" would continue their interest in

the organization, and a superficial view of the recent meeting tended to confirm that opinion.

A sense of gloom hovered over the Trustees' meeting Tuesday night and the opening session of the House of Delegates on Wednesday, because of the death of Dr. Hunter, a former President and until Tuesday morning, Secretary of the Board of Trustees. Dr. Hunter had packed his bag, including his official papers completed up to the minute, and retired to bed with the intention of making an early morning start to drive from Westville to Asbury, and ere normal sleep could come he was stricken by coronary thrombosis and lived but a few minutes thereafter. In his passing, the Society lost one of its safest, sanest and most efficient organization workers, as well as one of its most illustrious members.

At this meeting, President Sommer closed a year of marked activity in the presidential office, and presided over one of the busiest sessions the House of Delegates has ever held. The amount of work inaugurated during the past year, considered by the Delegates, and advanced to his successor, is indicated by the large number of special committees provided for to carry on the projects approved and resolutions adopted.

The scientific program for the general sessions was not up to standard and its presentation suffered further from the lack of an audience Friday afternoon. The exodus of those who had been chiefly interested in the business and political conferences of Wednesday and Thursday, and the fact that so many

members merely dropped in for part of one day, and made choice of that day which afforded the greatest amount of entertainment, serve to explain the fiasco of the last afternoon session.

All of the sections were well attended, and a movement was launched to establish next year a Radiologic Section.

The Woman's Auxiliary apparently had a very satisfactory meeting and is progressing as well as could be expected.

We hope to publish the "Official Transactions" this year along with the August Journal.

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### ENTERING UPON A NEW FISCAL YEAR

At the close of the Asbury Park meeting, Dr. John F. Hagerty, of Newark, ascended to the presidency of the state society and opened a new year of the organization's work. No more worthy person could have been selected from the society's membership for this honor. In the city of Newark, where he is best known, Dr. Hagerty is universally loved and respected, as a surgeon of great ability, a physician of professional distinction, and a man of the highest probity. He is taking leadership in the society at a critical moment in its life, a time when questions of the most serious import are demanding consideration and, if possible, solution, but all who know him feel that he will prove himself an active, wise and courageous leader. As will be seen later, in reading the convention transactions, he is instructed or authorized to appoint an unusually large number of committees to study a variety of problems. Every member, as appointed or called upon for service, should give him all possible assistance in his efforts to conduct the affairs of this society satisfactorily.

The election of other officers resulted in promoting Dr. Lancelot Ely, of Somerville, from Chairmanship of the Committee on Scientific Work to the position of Third Vice-President. Dr. Ely has represented his county faithfully and well in the work of the Welfare Committee for a number of years, besides having filled all the offices of the Somerset County Society.

### STATE SOCIETY TRANSACTIONS

It has been customary to publish the complete transactions of the Annual Meeting as a Supplement to either the August or September Journal, depending upon receipt of the reporter's transcript. This year our meeting was held a week earlier than usual, and the reports are being received with sufficient promptness to justify the expectation that the proceedings can be published early in August. In consequence of that hope, it seems unnecessary to present this month any elaborate summary of the happenings at Asbury Park, but our readers who were deprived of the privilege of attending the convention will doubtless want to have some news of the event.

At the opening session of the House of Delegates, on Wednesday morning, President Sommer called attention to an unfortunate feature of the Constitution and By-Laws, which provides for delivery of the Presidential Address at a fixed time that is not reached until after the Delegates have completed their work upon the Society's business affairs. As he pointed out, at the conclusion of his term the President should have some recommendations to offer and advice to give as the result of experience. Dr. Sommer met that situation by at once presenting an abstract of his prepared address, but some provision should be made by law makers of the society to correct the complication.

Perhaps the most marked feature of the convention was the amount of new business introduced and the number of problems offered for solution. The incoming President was authorized to appoint special committees to investigate and study such questions as state medicine, classification and control of specialism, the Workman's Compensation Law, amendment of the Hospital Lien Law, provision in the Medical Practice Act for a grievance committee, urging the Motor Vehicle Commissioner to require more complete physical examinations of those seeking license to drive automobiles, revision of the state health laws, coöperation with the Board of Education regarding health measures applicable to school and pre-school children, and others that escape our thought at the moment.



## Medical Ethics

### MEDICAL SOCIETIES

John Hammond Bradshaw, M.D., F.A.C.S.,

Orange, N. J.

"In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession."—Principles of Medical Ethics, A.M.A.

We find it the case inside and outside the profession that some men like clubs and some detest them: And while a medical society in many ways is a club, it is also in many ways very different. Generally speaking, a "clubbable" man is glad to join a medical society. But there is no special obligation for a man to be an Alpha Delta Phi or an Elk, a Rotarian, or even to join his Country Club in the sense that he should join his local medical society, his county medical society (and the American Medical Association), and, if he is a specialist, some regular organization that represents his special work.

In social clubs, the advantages are mostly social, whereas the medical society is, rightly speaking, almost altruistic as well as social, highly educational, and its chief object is the advancement of medical science. No doctor *in his own interest* can neglect his medical society. If he does so, his own is the chief and only loss.

Look at the names of the great leaders of the medical profession and you will be amazed to find so few of them who are not also leaders in medical societies. These societies are the clearing houses in their different localities for medical thought. They stand in the medical world as the Stock Exchange does in finance, for here you get increase in your stock of medical knowledge, and in our medical exchanges the losses are few and the profits are great.

Dr. Osler wrote of this subject, membership in the medical society, with his unusual understanding:

"But, after all, the killing vice of the

young doctor is intellectual laziness. He may have worked hard at college but the years of probation have been his ruin. Without specific subjects upon which to work, he gets the newspaper or the novel habit and fritters his energies upon useless literature. There is no greater test of a man's strength than to make him mark time in the 'stand and wait' years. Habits of systematic reading are rare, and are becoming more rare, and 5 or 10 years hence, as his practice begins to grow, may find the young doctor knowing less than he did when he started and without fixed educational purpose in life. *Now here is where the medical society may step in and prove his salvation.*" (Italics mine.)

But even medical societies can have their diseases; which may even cause gangrene and death. A certain amount of well directed politics is absolutely essential to the preservation and advancement of any society. But if this is misdirected and actuated by selfish motives, medical politics can cause dry rot.

## Esthetics

### CULTURE

(This article, taken from the front cover page of the American Medical Association Bulletin of May 1931, was abstracted from *The Dip-lomate* by Thomas G. Orr, M.D.)

"Any professional man is hardly doing his full duty to himself and to the profession he represents unless he gives some time to education and cultural improvement. I am convinced that by so doing in medicine one will make a better physician. Even a doctor is partly judged by his general information of affairs, and, therefore, cannot afford to neglect all the better things in general education. Eben Holden was right when he said: 'Got t' judge the owner as well as the hoss. If there's anything the matter with his conscience it'll come out in the hoss somewhere.' A doctor cannot afford to be substandard in things educational or the evidence will crop out somewhere and his shortcomings be made evident. Education keeps us out of a rut, it demands respect, and, of equal importance, it is a lasting pleasure. Education and culture go hand

in hand. Culture is quite difficult to define, and I am confident that many times it exists in outward show and mannerisms only. A mother may teach her son to tip his hat to women and to stand in the presence of her guests, but he will not be cultured if he lies to her about his escapades or steals from his neighbors. Most men of science are led to believe that many of the qualities that go to make up an educated and cultured gentleman are inborn and cannot be the result of environment only. Such a heritage does not mean family or social position. 'The creature we call a gentleman lies deep in the hearts of thousands that are born without chance to master the outward graces of the type.' (Owen Wister.) If the qualities that lead to education and culture are born in a man, he is fit to become a doctor."

Concerning the last mentioned aspect of the question, the degree of culture desirable in a prospective physician, the Journal of the Michigan State Medical Society, of June 1931, contained an interesting editorial from which we quote as follows:

"Culture is an elusive entity; it is of a class of words such as light, life, death, difficult to define, yet its manifestations are clear to everyone. Nor in our opinion can culture be acquired by memorizing Elbert Hubbard's scrap book nor by 15 minutes a day with Eliot's 5 ft. book-shelf, as interesting as these may be. We can see how such a course might make of a man or woman an intolerable bore.

Externally we associate culture with neatness of attire, with carefulness combined with ease in speaking, with a voice that is not unpleasant. We can hardly conceive of a cultured man who is not educated, but there are many educated persons who are anything but cultured. The cultured life may be built upon a book foundation. The cultured person is critical in his outlook on life. In other words, he does his own thinking and accepts truth only on evidence; yet, he is tolerant where tolerance can be considered a virtue, which it is not always. He should aim at accuracy, avoid cock-sureness of statement, and never hesitate to acknowledge his limitations. Yet all this is not a definition. We are inclined to place the term *culture* in the same category as *personality*, a word we were never able to define to our satisfaction."

## In Lighter Vein

### Home Treatment

"Good morning, Mrs. Kelly," said the doctor, "did you take your husband's temperature, as I told you?"

"Yes, doctor, I borrowed a barometer and placed it on his chest; it said 'very dry,' so I bought him a pint o' beer an' he's gone back to work."—Boston Transcript.

### Those Luscious Accents

Wife—"John, is it true that money talks?"

Husband—"That's what they say, my dear."

Well, I wish you'd leave a little here to talk to me during the day. I get so lonely.—Bennington Banner.

### Desperate Moment

Mother—"Johnny, if you eat more cake, you'll burst."

Johnny—"Well, pass the cake and get outa the way."—Boston Young Men's News.

### Explained at Last

"Well, you've got one of them ear things for your deafness at last. That's what I've been telling you to do for 5 years."

"Oh! That's what you've been telling me for 5 years, is it?"—Punch.

### Friend of the Stork

The doctor of a country village had 2 children who were acknowledged by the inhabitants as being the prettiest little girls in the district.

While the 2 children were out walking one day, they happened to pass quite near 2 small boys; one lived in the village and the other was a visitor.

"I say", said the latter to his friend, "who are those little girls?"

"They are the doctor's children," replied the village boy. "He always keeps the best for himself."—Montreal Star.

Doctor—I suppose, Mrs. Johnson, that you have given the medicine according to directions.

Mrs. Johnson—Well, doctah, I done mah bes'. You said give Sam one o' dese heah pills 3 times a day ontill gone, but I done run out o' pills yistaday an' he hain't gone yet.

Joshaway Crabapple says:

"Wooden legs are not inherited; wooden heads often are."

### Consulting the Oracle

Gentleman (at police station)—"Could I see the man who was arrested for robbing our house last night?"

Desk Sergeant—"This is very irregular. Why do you want to see him?"

Gentleman—"I don't mind telling you. I only want to ask him how he got in the house without awakening my wife."—Harvard Lampoon.

### There's No Perfect Crime

Betty—"How did mama find out you didn't really take a bath?"

Billy—"I forgot to wet the soap."—Boston Transcript.



## Lighthouse Observations

### COMBINATION ANESTHESIA

Much has been written recently about anesthesia and anesthetics—general, spinal or intravenous—and a variety of drugs usable by one or other of these methods. The reasons for such consideration are well stated by Willard Bartlett (Jour. Missouri Med. Assoc., 28:43, January 1931):

"No one now alive remembers the period when it was current practice to tie or hold a patient down during a harrowing surgical procedure. Having this picture in mind, the surgeon of an earlier day must have been more than satisfied when the introduction of ether and chloroform forever freed the sufferer from the torture that had been his while on the table. Are we now, nearly 100 years later, keeping step with progress in other fields unless we make every effort to overcome the anxiety, insomnia, restlessness, nausea, sweating, pain and thirst which customarily precede or follow surgical operations? If we eliminate these, we can accomplish 4 desirable ends by diminishing the likelihood of (a) respiratory complications, (b) vomiting, (c) distention and (d) bladder paralysis.

Up to May 1 of this year we had studied the effects of veronal and luminal upon 1218 patients, having in mind widening the scope of surgical anesthesia. This paper gives the result of our experience with 190 individuals who, in the accomplishment of our anesthesia plan, took relatively large amounts of luminal, the drug being administered in a single dose to 134 of them, and in broken doses to the remaining 56.

Our patients are carried for about 36 hours in what may be called a dream-state, being actually unconscious during the operation only. They are more or less responsive at all times, seem wholly rational, answer questions, but manifest no interest in their surroundings then and later retain only the haziest, if any, recollection of this entire period and its happenings. Our prolonged semi-anesthesia renders it unnecessary in goiter cases to operate outside the operating room, or, indeed, to start gas in a patient's bed no matter how toxic she may be; she is indifferent to the change from bed to operating table, hence no psychic damage is done.

Every satisfactory anesthesia is a compromise between advantages gained and risks taken. One does not claim that a drug so potent as luminal, for example, is utterly harmless; it cannot possibly be harmless. Still, it has seemed in our hands to have greatly reduced the need for much of the more dangerous anesthetic substances and at the same time to have possessed advantages not inherent in them. It is easy to exceed the proper dose of any sedative drug, thus risking the pathologic rather than the wanted physiologic effect. With this axiom in mind we endeavor to induce a mild anesthetic state of from 24-36 hours' duration by superimposing upon one another the influences of luminal, nitrous oxide (sometimes ethylene), one dose of morphin if great postoperative pain be present, and several doses of pyramidon. In some instances, of course, spinal, regional, or other form of local anesthesia is substituted for the gases, but the patient is never allowed to remain completely awake. We believe it more humane to carry out major surgical operations under general anesthesia if feasible, but it must be remembered that an occasional goiter patient will seem on the verge of drowning in mucus soon after gas is started. Just here the luminal preparation has its particular value. Gas is dis-

pensed with, procain is injected, the operation proceeds with the patient rather oblivious to her surroundings and later unable to state just what anesthetic method was employed. No doubt many other similar emergencies arise touching every part of the body. Atropin tends to rouse the sleepy luminal patient if employed before an inhalation anesthesia, hence its use is not to be recommended if it can be avoided. However, we are frequently forced to employ it when an excessive amount of mucus is secreted early in a thyroidectomy. Should there be actual need of producing artificial sleep at any period of the hospital stay outside the vital 36 anesthesia hours, so-called, we resort to chloral hydrate and paraldehyde by mouth or rectum.

Our standard dose for strong patients in middle life is 15 gr. of powder in hot milk, taken all at once by mouth 3 hours before the operation, provided the blood pressure is not low. A very small or greatly depleted woman takes less, and a very large, active man needs more, as does one having a toxic goiter.

A deep surgical inhalation anesthesia sometimes seems more difficult to secure after luminal preparation for the reason that a patient so treated cannot inhale as deeply as would otherwise be possible. This may possibly be a blessing in disguise, so far as danger from the inhalant is concerned.

The writers present a plan of anesthesia which has been maturing during 10 years' study on selected patients; its conspicuous value in general surgery has quite naturally suggested employment in several other fields where a more or less complete anesthesia is essential or at least desirable. Hence the plan is amplified at this time in the hope that it will meet the needs of most men who comprise a general medical assemblage.

A perusal of German and French literature discloses indications that barbituric acid compounds neither slow up uterine contractions nor poison the fetus, hence one is inclined to believe that this anesthesia plan might be of use especially to the physician who has neither a hospital nor an anesthetist. From the obstetricians we gather that a multipara might average about 6 hours and a primipara about 12 hours in labor; hence we are advising that 3 gr. of luminal be given every hour to the former from the onset of pain until 5 doses have been taken. The primipara might better take 1½ gr. every hour until 10 doses have been used. For the actual delivery, a very little gas or ether may be needed as is the case in major surgery.

Dr. Tonelli tells me that a tonsillectomy patient under the influence of luminal is much more manageable during the operation and preceding nerve block than is one who has not taken the drug. Further, it very greatly lessens the misery of the first postoperative day although he uses only one-half of our dose. Our wide experience in general surgery has demonstrated that it may be used in rather large doses without abolishing cough, gag, or swallowing reflexes, a matter of superlative importance since retention of these reflexes constitutes the patient's best defense against lung abscess resulting from inspiration of infective material during or after a mouth operation.

Dr. Caulk feels that a field for this plan of semi-anesthesia exists in operative cystoscopic work, there being many such patients whom one desires to make oblivious to their condition and surroundings for 24 hours following the procedure.

A 15 gr. dose of luminal goes far toward enabling one to make satisfactorily the type of

bimanual pelvic examination for which a general anesthesia has been considered essential. In some instances the woman retains no recollection of what has transpired. The saving of expense and the avoidance of risk are quite obvious. This plan cannot, of course, be used in the treatment of ambulatory patients.

Among the many highly disagreeable surgical procedures is the induction of a spinal anesthesia. We always prepare such a patient with luminal, and then, provided the blood pressure has not dropped too low, introduce the needle while she lies on the side or on the face, depending on the operation to be done.

Not all patients react alike to the after-effect of luminal, hence postoperative treatment deserves special consideration. The great majority of patients need no sedative after leaving the table; a very small second group which has been underdosed before operation is given luminal (1½ gr.) with pyramidon (5 gr.) every 4 hours as long as restlessness or complaining continues, while members of a still smaller third group become mildly maniacal and require morphin (¼ gr.), after which they act as do patients in the large group first mentioned.

The actual results obtained in the treatment of 134 patients who received a single dose of luminal are tabulated as follows—Effect upon reaching operating room: slight, 13; medium, 87; profound, 34. The effect of the anesthesia lasted 26 hours in the average individual."

#### INTRAVENOUS SODIUM AMYTAL

Reporting an experience of 200 surgical cases in which complete or partial hypnosis was produced by intravenous administration of sodium iso-amylethyl barbiturate, Floyd L. Grandstaff (Am. Jour. Surg., 10:300, November 1930) says:

"In preliminary observations published by the manufacturer, it was recommended that sodium amytal in doses of 20 to 25 mg. per kilogram of body weight be used for prolonged surgical anesthesia. In order to use sodium amytal as the basal agent in anesthesia, this dosage was regarded by us as the maximum. This was computed as 1 gr. per 10 lb. of body weight. We estimated that temperature, thyroid dysfunction, age, development, cachexia, dehydration, preoperative medication, type of operation, duration of operative procedure, etc., would alter the amount of sodium amytal necessary to produce satisfactory narcosis, and allowances were made for such factors.

Patients with hypertension and arteriosclerosis were observed to react more quickly to sodium amytal, and required less than patients having normal blood pressure. Obese patients required less per kilogram than did lean or muscular patients weighing approximately the same. An increase in metabolic rate required an increase in the amount of sodium amytal, and this was manifested in adolescents who required more per kilogram of body weight.

A decrease of 3 to 5 gr. of sodium amytal was possible by increasing the preoperative morphin from 1/6 gr. to ¼ gr. Alcoholics, and patients who had been receiving barbituric acid derivatives for sleeplessness over long periods, required the maximum dosage. The average dose required for laparotomy was 11 to 13 gr.

The relatively small dose of 10 mg. per kilogram of body weight, or 1 gr. per 20 lb. of body weight, was used in combination with local anesthesia for cystoscopy and nose and throat operations. In these instances, the patients did not lose consciousness, and they were susceptible to requests,

so that pyelograms were obtainable if desired, or the patients were able to cough and raise mucus or blood as the case might be. The patients would often complain bitterly and appear rational, yet none of them had any memory of painful experiences.

Sodium amytal as dispensed, when mixed formed a 10% solution. No solution was allowed to stand for longer than 15 minutes before use, and a solution was discarded if not clear and cloudless. A 10% solution was injected intravenously not more rapidly than 1 c.c. per minute. In cases in which profound hypnosis was desired, the rate of injection was decreased to 0.5 c.c. per minute as soon as the patient became unconscious. A record of systolic blood pressure, pulse and respirations was made during each minute of injection and at 5 minute intervals throughout operation. It was found that a decrease in rate of injection would often control what appeared as a too rapid decrease in blood pressure. This was especially true in cases of hypertension and arteriosclerosis. Hypnosis was produced in the average patient in 3-5 minutes. The supplementary anesthesia consisted of inhalation of nitrous oxide gas and oxygen.

Sodium amytal, as used in this series of cases, did not produce anesthesia, but produced hypnosis, and a supplementary anesthetic was required. The administration of sodium amytal produced a lowering of blood pressure in all cases, and the decrease was more marked in cases of hypertension and arteriosclerosis. The immediate or remote effect of the blood pressure change was not determined. Relaxation of the throat and tongue produced a temporary cyanosis unless closely watched and an airway or Connell tube inserted. The shallow respiration and long period of quiet after operation was credited with a tendency to pulmonary congestion. Of the first 100 cases, 25% required catheterization, but once the nursing staff became accustomed to awakening sodium amytal patients and encouraging them to void, the percentage was no higher than after other general anesthetics. Urine specimens of all patients were found to contain acetone during the first 24 hours. Two patients manifested a bright red rash which disappeared within 36 hours.

Postoperative complaints of nausea and vomiting were absent in 95% of the cases. There appeared to be less paresis of the intestinal tract with consequent less pain from postoperative gas pains.

The quantity of inhalation anesthetic was reduced. Amnesia without hypnosis was obtainable and with local anesthesia was especially adaptable to minor operations with special reference to cystoscopy.

Use of sodium amytal as the basal agent in combination with inhalation of gas and oxygen, with or without a preoperative dose of morphin, produced satisfactory obtundation for all major surgical operations, and was considered to have many advantages not obtainable from other anesthetic drugs."

Concerning intravenous use of sodium amytal, Francis M. Findlay, reporting experiences at the Cambridge (Mass.) Hospital (New England Jour. Med., 203:1029, Nov. 20, 1930), says:

"Intravenous anesthesia has been used abroad for the past 10 years. It was first introduced in France, later in Germany, and for the past 2 years has been employed in some of the larger clinics in this country. Its use has been somewhat limited, as it has been regarded by many as a rather dangerous drug. Our experience at the Cambridge Hospital embraces a small but varied



series of cases in which the results were uniformly satisfactory, and I deem the drug of sufficient merit to warrant reporting at this time. We are not advocating discard of any of the generally accepted anesthetic agents which have been used so successfully over long periods of time; we are simply offering our experience with an anesthesia which we feel holds a definite place and has made a distinct contribution to our anesthetic equipment. The toxic effects of ether, particularly in debilitated patients, or in poor risks, are too well known to discuss at this point. Local anesthesia, well administered, has come to have a definite place in the surgical field. Abroad, the majority of surgical operations are done under local anesthesia. In this country there is an increasing tendency toward the use of local anesthesia, but many surgeons and patients object to the mental strain to which the patient is subjected because he is conscious. In spite of this fact, local anesthesia has made rapid strides and in many clinics is employed by choice. With sodium amytal supplemented by local anesthetics we feel that we have an ideal anesthesia for carefully chosen cases, particularly the aged and poor surgical risks.

The only preliminary medication we have used has been morphin sulphate,  $1/6$  or  $1/4$  gr., an hour and a half, and repeated half an hour, before administration of the sodium amytal. We have not wished to complicate the picture by the administration of other drugs. In patients having morphin, the anesthesia was pronounced and of longer duration than in those without morphin. Lundy, in the Mayo Clinic, advocates 10-15 gr. of chloretone by mouth, 2-3 hr. before operation, followed by a single dose of morphin,  $1/4$ - $1/6$  gr., and atropin,  $1/150$  gr. The average duration of the anesthesia is from 40 minutes to 1 hour. The patient, at the end of this time, usually begins to move and may make a few incoherent remarks, but for the next 12-24 hr. generally sleeps quite soundly. There has been no postoperative nausea or vomiting in any of our patients.

With sodium amytal alone, without preliminary medication, we have been able to obtain satisfactory anesthesia for simple operations, such as reduction of fractures, curettage, rectal operations, and simple operations on the neck, head or extremities. In combination with morphin, we have obtained satisfactory anesthesia for a radical breast amputation, appendectomy and hernia. In combination with spinal anesthesia, any abdominal operation that does not require over 40 minutes can be readily done. Relaxation is complete, and the patient is entirely unconscious. From our experience, we feel that the combination of spinal anesthesia-subarachnoid block—as Labat terms it—with amytal offers the ideal anesthesia in the poor risk. The spinal anesthesia insures complete relaxation of all muscles, while the amytal renders the patient unconscious and assures from 12 to 24 hr. postoperative comfort. Mason and Baker feel that the chief virtue of the drug is that it frees the patient from mental strain and worry. We concur in this finding but feel that the lessened shock, especially in the aged and feeble, is the greatest contribution. In 1 or 2 operations in which there was some delay, it was necessary to administer novocain infiltration to close the abdominal wall, or supplement the sodium amytal by gas or ether. In 2 cases we were able to perform radical operations upon patients with hypertension and chronic nephritis without any discomfort or injury. The patients require less postoperative morphin, as the sedative effects of the anesthesia often last until

well into the next day following operation. Two of our patients required secondary operations. Both requested sodium amytal. We have had no deaths attributed to the use of this drug. There were 2 deaths in this series of 30 cases, 1 in a cardiac aged 74, who died of cardiac failure 4 days after drainage of the gall-bladder; the second in a 92 year old woman with general peritonitis, who developed a volvulus of the small intestine 10 days after operation. It does not seem fair to attribute either one of these deaths to the anesthetic. We have not noted the bladder complications or pulmonary edema which Mason reports. Certainly our patients have suffered less shock than those having inhalation anesthesia. We have used the drug twice to quiet excitable nonoperative patients. We have used it once for a wildly excited alcoholic, with excellent results. It is ideal for operations about the head or neck, and wherever the cautery or diathermy is used the explosion hazard is removed."

## Current Events

### TRISTATE MEDICAL CONFERENCE

The eighteenth session of the Tristate Medical Conference was held Saturday, May 23, 1931, at 10.30 a. m., at the University Club, Philadelphia. Those present were:

New York—William H. Ross, Brentwood; and Joseph S. Lawrence, Albany.

Pennsylvania—Ross V. Patterson, Philadelphia; William H. Mayer, Pittsburgh; Walter F. Donaldson, Pittsburgh; Frank C. Hammond, Philadelphia; Harry W. Albertson, Scranton; Arthur C. Morgan, Philadelphia; William T. Sharpless, West Chester.

New Jersey—George N. J. Sommer, Trenton; J. B. Morrison, Newark; Ephraim R. Mulford, Burlington; Henry O. Reik, Atlantic City.

Dr. Lawrence expressed Dr. Sadlier's regrets at being unable to attend the Conference. A telegram containing Dr. Vander Veer's regrets also was read by Dr. Reik.

### PROGRAM

#### Our Responsibility for Public Education Regarding Comparative Costs of Sickness

Ross V. Patterson, M.D.,  
Philadelphia, Pa.

Our program is encompassed by 2 topics, but they are related and I think perhaps it will facilitate the discussion if both presentations be first made and the discussion follow. With your permission we will proceed along that line.

In making my own presentation, I may say that I have had in mind for some time the relation of certain facts and studies that have been made within the past few years with regard to the cost of medical care, the cost of medical education, the obligation of the profession to provide certain medical service to the indigent and to those in moderate circumstances. There has been a good deal of medical discussion, a good deal of lay comment, and I think there has been a good deal of misunderstanding with regard to the purport of certain facts which have been ascertained in various studies and of certain opinions that have been expressed by leaders in our profession. There is thought to be a need for public education. My

own feeling is that there is a greater need for education of the profession itself and that public understanding will be the better when medical understanding of certain facts becomes clearer than it is now.

Dealing with round figures, the national income is about \$100,000,000,000 a year and we have to understand that fact in order to interpret the national cost of any activity or of any industry. About \$3,000,000,000 is the cost of medical care; which is, of course, approximately 3% of the national income. That \$3,000,000,000 is apportioned to various bodies and activities concerned in medical care and, roughly, about  $\frac{1}{4}$  of that goes to doctors; which is, of course, \$750,000,000 per year for the 120,000 practitioners in active practice—a little over \$6000 per year each. And yet studies have shown that only about  $\frac{1}{2}$  of those physicians make so much as \$3000 per year. So, it is apparent that the average doctor is not being over-paid.

The hospitals receive about  $\frac{1}{4}$  of this \$3,000,000,000 expenditure for medical care; that is another \$750,000,000; or perhaps a little more than that. There are some 8000 hospitals in this country and they have about 1,000,000 beds. I do not know what they cost but the investment of hospitals would certainly have to be \$4000 per bed as a low figure for construction cost; which would mean \$4,000,000,000 invested in hospitals, and it takes something less than \$1,000,000,000 a year to run them and some 500,000 people to carry on their activities.

From the total expenditure for medical care about \$750,000,000 goes to the druggists, not only for prescriptions but for all the patent medicines and self medication of the people of this country. Then the remaining \$750,000,000 goes to dentists, nurses and quacks. Now there is, in round figures, our expenditure of \$3,000,000,000 for medical care;  $\frac{1}{4}$  to the doctor for division among 120,000 doctors;  $\frac{1}{4}$  to the druggists;  $\frac{1}{4}$  to the hospitals; and  $\frac{1}{4}$  to the dentists, nurses and quacks. Even these figures seem very large but their importance is only to be estimated by comparing them with other national expenditures. We learn, for instance, that the salaries of railroad employees in this country amount to \$3,000,000,000 a year. That is as much as is paid for all the expense of medical care, regular and irregular. The bootlegging bill of this country is not less than \$3,000,000,000 a year. The tobacco bill of this country: you know in 1930 there were 120,000,000,000 cigarettes sold in this country. That is 1000 for each man, woman and child, and the cost of tobacco in this country was about \$2,000,000,000. Jewelry and furs to the amount of \$750,000,000, or the equal of what is paid to the doctor. Perhaps we could consider jewelry and furs as luxuries, yet we hear very little complaint about the high cost of jewelry and furs. There are \$4,000,000,000 a year spent for automobiles; that is more than the entire cost of medical care. It takes \$1,000,000,000 worth of gasoline to run them each year, and that is more than all the doctors get put together. The women of this country spend for cosmetics and in beauty parlors as much as \$750,000,000 a year—as much as the entire country pays to all the doctors. Now do not understand me as criticising this expenditure. If it were twice as much I would still approve of it. I believe it is a woman's duty to be even more beautiful than nature has made her, and if it costs many times that amount it would be a proper expenditure. But, I merely mention it in comparison to the cost of medical care. When I make these comparisons it is seen

that the cost of medical care is not out of proportion to other national expenditures. It is unfortunate that the public has somehow or other, chiefly through what has been said by the medical profession itself, come to believe that it is paying an excessive amount for the fees of the 120,000 doctors, for the hospitals which contain 1,000,000 beds and to which nearly 10,000,000 people pass each year, and that it is paying too much for all of these things. Now, as a matter of fact, it is not. Calling attention to these facts does not mean that we should not continue to do what we can to lessen the cost of medical care, and particularly for those who find the burden heavy, but there is no good reason why the doctor should disparage the value of his own services or the institutions in which he works.

Now, what about the doctor himself? Well, we hear a good deal these days about the excess of applicants for medical schools, that there are a large number of men seeking to get into the medical schools, and a large number are turned away. Some who believe this to be the fact interpret it as the endeavor of the medical profession to imitate the methods of trade unions by limiting those who may enter the practice of medicine. What are the facts? Every first-grade medical school in this country has a large number of applicants for admission; a number far in excess of the number of places in the classes. If we take a half dozen leading schools of this country they will show 2000 or 3000 applications for every 150 places; that is 20 men for each place, and it seems to indicate a tremendous number of applicants being rejected. Facts are that about 8000 men make about 30,000 applications, and that 6000 of those men are accepted and 2000 are rejected;  $\frac{3}{4}$  of those who apply and complete their applications find admission to some medical school—not necessarily the school of choice. Of those 6000 men, about 4500 are graduated; that is,  $\frac{1}{4}$  of the number are eliminated after admission to the medical course.

It is interesting, in endeavoring to ascertain whether or not the doctor is over-paid, to inquire into the cost of his training. Those men who are admitted to the medical schools are for the most part college graduates. Some of them have had but 3 years of college work, and a few of them are admitted in some of the schools upon 2 years of college work following the completion of a high school course. If one estimates the cost of the medical course itself, eliminating the expense of the college preparatory course, he will find that each student must spend a minimum in tuition and in expenses of living, for books and instruments, during the session of 8 months for 4 years, not less than \$5000. That does not include his traveling expenses to or from the school. It does not include those who are more liberal but it represents about the minimum; \$1200 a year is about the least that any medical student can get along with these days; \$400 of that is tuition, and the other \$800 is only \$100 a month for his board and room and books. If one would add to that expense the value of his lost time, or what his earning capacity might be, one would say that a medical education would cost from \$10,000 to \$20,000, eliminating the expenses of his college preparatory work. He graduates at about the average age of 26, then takes 1 year or 2 in a hospital, and it is 2 or 3 years more before he is self-supporting. At 30 years of age he is just about prepared to support himself and to begin to be active in the practice of medicine. Now, it is an interesting fact that if you would take the amount that his educa-



tion has cost and add to it the loss in earning power, and put those sums together at the time of his graduation and invest the fund at ordinary 6% compound interest, at 50 years of age he would have a sufficient sum to maintain him for the rest of his life. And yet, how many physicians at fifty could retire? Is the doctor over-paid? He most certainly is not, with an average income of \$6000 a year and fully half of them earning only \$3000.

There is one other thing that has been in my mind for some time. I have noted on many occasions a tendency on the part of the members of the medical profession, and often of its leaders, to speak rather disparagingly of the work of the medical profession, and of its accomplishments and its attainments. Modesty is, of course, a virtue but undue modesty may be a fault. How many of us have heard physicians in public addresses speak amusingly of the failures of the medical profession, call attention to opinions which were held 50 years ago that today seem ludicrous, which, of course, is an easy way to get a laugh. When I served on the Commission of the Healing Arts, there were many, many times when the chiropractors, osteopaths and other quacks convicted the medical profession of the grossest blunders, of the most deplorable lack of knowledge, from words taken out of the mouths of our own leaders. I believe that it is an important thing for our medical societies to have in mind the education of our own members, to enhance somewhat the self-esteem of the rank and file of the practitioners of medicine. It is amazing how little is known by members of our organization about the history of medicine, its great accomplishments, its great names. There is too little said about these things. I believe it would be a good thing if every county medical society devoted one evening of each year to a program which set forth biographic sketches of great medical men or dealt with great achievements in medicine. These facts are too little known by the profession, and they are almost totally unknown to the public. For instance, the most recent bulletin issued by our Health Department, of Philadelphia, calls attention to the fact that in 1906 there were in the city of Philadelphia almost, not quite, 10,000 cases of typhoid fever, and that last year—24 years later—there were just about 100 cases. I began the practice of medicine in Philadelphia in 1906, and when I saw this statement my mind went back to the time when, as a young practitioner, a considerable portion of my practice was made up of cases of typhoid fever. From a pecuniary standpoint they were particularly profitable cases, for typhoid fever is a disease of long duration, of many sequels, and has prolonged convalescence; need for medical care continues over a period of many weeks. From a pecuniary standpoint the loss to the medical profession, incurred by a reduction of typhoid fever cases from 10,000 a year to 100 per year, if worked out in figures, would be stupendously high. And yet, how was this brought about? By the profession itself; the only profession in the world that seeks to reduce the material upon which it depends for an existence. The public should be made aware of this fact. First of all our own members should be made aware of these and similar facts, and should show pride in them and be prepared to defend the profession against assaults by the ignorant, the malicious and those who attempt to discredit our importance and the value of our work. It would be well, I think, to call attention to the uninterrupted existence of medicine—the oldest profes-

sion in the world, older than Christianity—going back to Hippocrates, 400 years before Christ. Attention should be called to the great accomplishments in surgery, in bacteriology, in preventive medicine, and all such things. Get it into the consciousness of all of our own members first, and then the public may learn from them something of our work.

### A Romance of Paternalism

Walter F. Donaldson, M.D.,  
Pittsburgh, Pa.

Tom Jones and Paul Smith, each aged 21 years, graduated together from a Pennsylvania college in June 1918, and immediately enlisted for service in the World War. They remained in separate training camps in the United States, and were honorably discharged in improved health in December of the same year.

Jones entered a broker's office, and 10 years later, at the age of 32, was prosperous and in good health, except for an epididymitis, which developed in 1930 after an ardent but ill-fated affair with a woman of easy virtue. Smith entered medical college in 1919, and after the necessary 5 years of preparation and 2 additional but voluntary years of hospital training, began practice in his home town, and in 1930 was chosen to be the genito-urinary surgeon on the staff of the local general hospital.

Broker Jones consulted Dr. Smith, his former comrade in arms, regarding his infection, and Dr. Smith advised an operation, to be performed at the home town hospital, and plans were made accordingly. But an enthusiastic former comrade, with a political slant toward special benefits, hearing that Jones was hospital-bound, reminded him that a vote-seeking group of congressmen had recently successfully piloted through Federal legislation providing free hospitalization and treatment for all former soldiers, regardless of their ability to pay or the relation of their disability to their war service. So, prosperous Jones, with his impairment received in an *affaire d'amour* 11 years after his discharge from the army, was transported, at government expense, to and from a distant government hospital, while Dr. Smith chalked up another fee lost, and the local hospital another empty hospital bed, to the absolutely unfair paternalistic competition of Uncle Sam.

Who provided the cash to pay for Broker Jones' free transportation, free hospitalization, and free treatment? His former comrade Dr. Smith, his neighbors who maintain the hometown hospital, and others who pay a Federal income tax. Approximately 15,000 of the approximately 30,000 World War soldiers at present in recently built, but frequently unnecessary, government hospitals are being treated for ailments in no way related to their army experience, and without consideration of their financial ability to pay the charges of hospitals and physicians adjacent to their places of residence.

Was Jones, during his convalescence at the hospital, much in contact with other patients—the much honored and worthy beneficiaries of a grateful government? No! Those today in government hospitals surviving wounds and sickness or disease actually related to war or camp service number but 15,000, and they are often segregated from the other 15,000 at present in government hospitals, who, like Jones, are receiving free treatment for ailments in no way related to their army experience and without consideration of their ability to

pay for treatment nearer home. So, in company with other country club members, who are convalescent from tonsil or appendix operations, or from an attack of gout or "nineteenth hole" neuritis, Jones whiles a way a prolonged period of convalescence criticising the wise President of the United States, who successfully obstructed the passage of legislation designed to extend the same economically unsound free hospital benefits to all the members of the families of former soldiers. Of course, Jones and the others wondered when an ungrateful government would include free clothing and free shoes, or begin to transport its indolent heroes to free hospitals built in Hawaii or Porto Rico, rather than to those only 2000 miles away from home.

After a stay in the hospital 3 weeks longer than necessary, or possibly had Jones been paying for it, (it is difficult to find enough patients to fill the beds in many of the government hospitals) Jones returned to his home town, where for a long time he "grouched" about the quality of the free service he received from a bureau-controlled government hospital.

In the meantime, Dr. Smith having aroused the interest of his fellow Federal income-taxpayers on the board of directors of the local hospital, as well as in the county medical society, is, or should be, endeavoring to convince his congressman and the senators from his state that the Federal government must respect certain fundamental principles of "states' rights", and abandon its policy of providing free medical and hospital care, and financial relief, for war veterans, except for impairments which can be reasonably related to war service, or the veteran who is unable to pay for treatment. Dr. Smith contends that since physicians represent the first group of citizens whose economic welfare is seriously threatened by this form of paternalism, and since they compose one of the few remaining individualistic professions, it is the duty of physicians to become politically conscious and to take the lead in fighting for recognition of "states' rights" and for discontinuance of Federal interference.

Those of us who retain knowledge of the meaning and relation of such Victorian words or terms as "pork barrel", and "rivers and harbors", to congressional raids on the Federal treasury, will no doubt agree that the large sums of Federal money spent in a congressional district to "improve" the harbor facilities of an erstwhile lack-a-daisical creek or river, or to erect a post-office building extravagantly large and ornate for the actual service requirements, pale into insignificance politically when compared with the patronage possibilities following upon success in landing a \$2,000,000 veterans' hospital for the "old home district". The initial investment may appear a paltry sum, but the annual budget and the political strength and patronage garnered in the influence of several hundred hospital employees in a congressional district may assure the fortunate congressman many terms in office. Therefore, the Veterans' Hospital Racket is here to stay.

Surely, those who pay taxes to the United States Government will not supinely continue to approve free medical, surgical, and hospital treatment of the disabilities of 4,500,000 veterans which originate as ordinary incidents of every-day life 12 or more years after the World War ended. Congressmen and Senators who support such legislation must be rebuked at the polls, and the great majority of the veterans retaining their patriotic principles must repudiate the noisy minority who continue their raids on the public treasury.

An editorial writer in a recent issue of the "Outlook" ascribes the victory in the passage of the Johnson Bill to the "grasping element in the American Legion", and to "cheap politicians in Congress who will oblige any vigorous minority in order to be reelected". The same writer describes the bill as: "A grab, a gouge—nothing more. Under the guise of providing for some meritorious border-line cases of disability, it opens the door for general pensions for everybody (4,500,000) who wore khaki during the World War."

"When the country adopted the War Insurance Act in 1917, it was assured that the scandals of the G. A. R. pension grab would never be repeated. When it granted the bonus, it was reassured again. The Legion itself went on record as opposed to general pensions. Yet, where are we now? Now we have a brand new method of granting money based on present-day accidents in civil life, and having nothing to do with the war."

With full knowledge of such facts, Calvin Coolidge said: "All countries on earth, in all history all put together, have not done as much for those who have fought in their behalf as our country alone has done since 1880."

It becomes hard for physicians to remember the earlier resolve to support every possible form of assistance to veterans, the victims of disease and injury resulting from war service, when we look on with righteous indignation while prosperous veterans are treated, without cost, at government hospitals, for civil life impairments such as enlarged tonsils, while vacant beds remain plentiful in home-town hospitals that are supported by the same citizens whose tax money also pays for the erection and maintenance of the already too numerous veterans' hospitals.

Apparently nothing can daunt the determination of the American Legion and other veterans' organizations in their relentless march toward bigger and better government aid for ex-soldiers. Following the recently enacted Federal legislation making available the cash bonus will come the already announced legislative program for immediate cash payment of all bonus certificates at their matured value. Who shall take the lead in developing resistance to this veterans' pressure, in shaming veterans out of such demands? If our younger men are taught that service to their country means that our Government thereafter must reward them irrespective of their needs, then we are indeed undermining the very foundations of good citizenship. Veterans must develop and manifest a peace-time patriotism before the burden of pensions becomes intolerable.

Our Civil War pensions, instituted in 1879, amounted in the year 1919 to \$125,000,000 or 4 times as much as they were 50 years earlier. If, as was recently proposed by National Commander O'Neil, of the Legion, the next Congress grants equality of pensions for veterans of all wars, then in a short time the Federal government will be paying out annually to its more than 4,000,000 veterans more money than we spent while actually engaged in the World War. A Billion Dollars a Year!

Dr. Smith, while agreeing that our Federal government should show every possible reasonable consideration to our war veterans, also emphasizes the fact that a larger proportion of physicians entered government service in 1917 and 1918 than from any other professional group. When the proposed 47 or more veterans' hospitals, each sustaining more salaried employees than patients, have been completed and occupied, then will "state medicine" have been thoroughly established



throughout the United States, never to be displaced because of the political patronage involved. And when veterans or their relatives no longer abound, then will the free hospital service be extended to other citizens; and by 1960 the private medical practitioner and the neighborhood hospital may largely have passed out of the picture.

Think it over, readers or hearers of this basically true story. Discuss it with your tax-paying neighbors, and with your congressmen. Any governmental policy which decreases the present-day attractiveness of medical practice to the intellectual type of mind, and causes men of ability to forsake it, is certainly against sound public policy. None can successfully deny, it is believed, that the Federal government, by the policy herein complained of, is in unfair competition with private physicians and the supporters of local hospitals who in turn are taxed to finance this paternalistic, bureaucratic form of medical and surgical hospital and dispensary practice.

#### DISCUSSION

*Dr. William H. Ross:* Both of these papers are so true and unquestioned that I can do nothing more than endorse them. It seems to me just at this moment that I have never heard any clearer presentation of 2 problems, the need of education of our own men, and the need of doing something about the increasing paternalism. Just how to do it is a little more difficult to state clearly. The suggestion that we should educate our own men through our county societies is undoubtedly excellent.

The remedy, medically, is to endeavor to establish leadership by our own people. I think that we are too modest in many respects. If we do not assume leadership it will be done for us.

Some increase in state medicine is rather inevitable and we can only minimize it by our own leadership. Some solution of the problem must be found and I do not know, after considerable study, more intense study than I have given to anything else, whether health insurance is not the solution. They have some forms of insurance in Europe that have not destroyed the medical profession. The average income of the physician in Denmark is as much as it is in this country. There, they hold their own because they are well organized; every doctor must belong to the Medical Association of Denmark; their graduates are all of one school; 80% of the population is insured. It is voluntary insurance, the government does not dictate the policy, and they have gotten along very well in meeting their social conditions. I believe that we must awaken to this one thing—that we must take leadership—and that does not mean that we shall change things very rapidly, but the influence of things that we do today will be of 2 kinds: one is the obvious thing that we can do, and the other the intangible influence which will be producing results even when we think it is not acting at all.

*Dr. William T. Sharpless:* With regard to Dr. Donaldson's paper, I accept it in full. I think it is a very good and timely presentation of the case and it ought to claim our interest and our action politically, as he suggests.

With regard to Dr. Patterson's paper, I cannot get all those figures in my mind. I hope that will be published and that we will be allowed to have an opportunity to digest it and work it out for ourselves.

I noted in a recent Bulletin of the American Medical Association a proposition to standardize specialists. Specialists get large fees; general practitioners do not, though they are largely the

feeders of the specialists. If the value of services by general practitioners was more fully recognized, I think it would make matters more satisfactory all around. Recently, for instance, I had a patient with cataracts. She was operated upon by a Philadelphia specialist. She is a person of moderate means, but she received a bill of \$1800 for the operation. She has only 10% vision in the eye operated upon, and he now wishes to operate on the other eye. That is the kind of medical charge that seems to me unfair.

I would like to see all the specialists standardized, for many people are posing as specialists who are not qualified but who advertise themselves, in one way or another, as specialists and charge large fees which they do not earn.

*Dr. Joseph S. Laurence:* I wish that Dr. Patterson had taken a few minutes more to suggest at least one solution for part of the problem which he has so ably described to us. I am convinced that the one thing above all others that the medical profession is lacking in today is self-confidence. The average doctor trembles at criticism by the public health nurse regarding his methods of diagnosis or treatment, and yet she doesn't mean to be unkind but is simply expressing what she has been thoroughly saturated with; i. e., that medicine is advancing so rapidly today that the man who is out of college for some time is obsolete. If I may draw upon my imagination to characterize medicine today, I would say that we are in the machine age, the time when a man's material equipment counts for more than his mental equipment. Unless laboratory procedures, some very extensive and complicated, are called upon to assist in diagnosis; unless a man's office is equipped with very *impressive and expensive* machinery; he is by many people considered not qualified to practice medicine. A portion of this feeling is due to the efforts of those public spirited people to bring to the people the best that there is in medicine, as they understand it, and not having been medically trained they do not understand medicine as physicians do. They rather look upon health as something that can be rationed out as food and clothing were in the army. I think that is one reason why the Legion succeeds as it does with Congress. It makes the people believe that medical care is something the soldiers had in the army; given to them as part of the equipment which the government issued to its soldiers in order to make them as nearly perfect as possible; and now that they are ordinary citizens, should not be denied them. We are living in a time when many people believe that medicine, or medical care, is something that should be bestowed upon the public, rather than that the people should know that there is available at any time this scientific knowledge. People are not taught to seek their doctors for information but are told that medical advice or service can be secured at such and such a place and that they should seek it there. I think it is a reasoning of this kind that is fostering health insurance. In my opinion, the public is certain to be disappointed later.

*Dr. Arthur C. Morgan:* It is seldom that one hears a presentation in such clear-cut manner as the 2 speeches we have had today. I happen to be a member of the Committee on the Cost of Medical Care, whose Chairman is Dr. Ray Lyman Wilbur, and last week we had a 2 day session that was attended by 50 of its 54 members; absentees were either sick or out of the country—which indicates the intense interest that is being taken all over the country in this very vital subject.

Truths are taught by contrasts. Dr. Patterson

has shown us, by contrast, the part that we of the medical profession play in the economic life of this nation. Our studies in the committee will give you amplified information from many angles. Dr. Patterson has likewise told us of the difficulties now attendant upon teaching medical students. If I may make the charge, I would say that many medical teaching institutions are becoming too specialized. They are concerning themselves too much with the ultra-research men. The Johns Hopkins University, Duke University, and the University of Rochester, are ultra-specialist institutions. I am pleased to state, and, thank God, that the Medical College of Albany is training general practitioners. There is your contrast. There has been too much of the fetish in recent years, in respect to training specialists, the fault for which lies largely in the faculties of the various medical schools of this country, which consciously or unconsciously create and set the pace for the young men and women as they go out into medicine. Dr. Patterson pleads for education of the doctors. I plead for education and enlightenment of the medical faculties. Dr. Wilbur has pointed to the threat of *state medicine* but he always has emphasized that the family doctor is the key-note to the situation. In our work at Washington we have the very valuable aid of many economists who are helping us to solve this problem of the cost of medical care and to resolve it into an economic picture which can be presented to lay people. The doctors cannot put the economic aspect of medicine before the lay people; economists can, and that will be one of the major accomplishments of this committee.

There are many magazines today eager to accept the specious statements, the "sounding brass and tinkling cymbal" of men and women who write for money, who can catch the eyes and ears of the public, and that is why we are having so much criticism of the medical profession; because editors of such magazines accept that tinpan stuff as presented to them, and which they think pleases the reading public.

Dr. Donaldson is to be commended in highest manner for his clear-cut presentation of a truth. I am a member of the American Legion. I have never been affiliated with the Veterans' Bureau, and have never been bound by any medical group, so that all the time I have been a free lance, and sometimes I have had the temerity to say things which brought forth criticism from others who would like to have said the same thing if they had dared. The American Legion seems to have gone wild in respect to wanting something for nothing, and especially on this matter of present day pension grants. Personally, from examining boys who were in the war and who have been referred to me, I am firmly of the belief that many of these boys have lost their American backbone and have become sycophants because they think, as Dr. Donaldson said this morning, that a paternalistic government will take care of them. They want also to have their families cared for. If the tide is not turned, there is no telling what will take place in time to come, simply because the "loud noise" and not the "best element" is in the saddle.

A word as to Workmen's Compensation and State Medicine, for the first is here and the second is in the offing. Workmen's Compensation has accomplished great good for the working man, but when the Act was put over in Pennsylvania, the medical profession was not awake to its opportunities and privileges and the result is that

under that law the physician has not received his right as measured by dollars and cents.

*Dr. Ephraim R. Mulford:* I unfortunately got into contact with a bus and automobile accident coming down the road and missed hearing Dr. Patterson's paper and got only a part of Dr. Donaldson's splendid essay.

It seems to me that education is the power that must turn the tide which now seems to be sweeping over the country and leading the public to believe it can get something for nothing. Being a general practitioner in a small town, it does not seem to me that we will ever be able to do without the family physician.

*Dr. William H. Mayer:* It is difficult to disagree with either of the essayists, and I certainly pay high tribute to the excellence of their presentations. The man on the firing line determines the efficiency of the army. So it is with the general practitioner in his ability to apply his art of medicine. Certainly the strongest link in the chain of medical practice is the man who first sees the patient and who has an intimate contact with him and his environment.

I was struck by what Dr. Donaldson said about political patronage and the necessity to fill the government hospitals and to extend the number of people in them. This is so clearly the problem which we see with social work in the large cities, where to get everything at any cost is part of their work and they do it at the expense of the morale of citizenship. I feel that we have a bigger and greater duty to humanity than simply the question of preventing illness and curing sickness. The citizenship of this country is one of the principal factors of its constitution and when we allow our people, either through governmental agencies or through the mass influence of the American Legion, to fail in recognition of responsibility for preservation of their own health, then we are helping to vitiate citizenship. We are allowing certain agencies in this country, with a paternalistic spirit, to remove the backbone from our citizenship. From a sociologic standpoint, this is an important public matter. There is a group of physicians who feel that they have no responsibility for public medical service; thinking it demeans them, destroys their self-esteem, and blows up much that has been constructed in a free country. If we allow the people to feel that they do not have to pay for medical care, the same as they have to pay for insurance on their household goods, then we have done an irreparable harm to the constitution and to the morale of our citizenship.

Dr. Patterson said that  $\frac{1}{4}$  of all the money expended for medical care goes to nurses and druggists. There is a big problem before us in regard to this. The use of prescriptions for certain kinds of drugs approved by the American Medical Association is something which appeals to the general mass and to the individual who indulges in self-medication at the drug store. In regard to allonal, for instance, these tablets cost the patient 10 cents a piece. For every tablet made the man who has a patent on allonal receives 1 cent. The cost of manufacture is probably about  $\frac{1}{32}$  of a cent. The use of such tablets by more than 100,000,000 people amounts to an enormous sum. I have been told that the man who makes allonal tablets was once a poor chemist, but that he has become a rich man. While I haven't any objection to a man becoming wealthy because he has chanced upon something of this kind and has shown some genius, yet I think the American Medical Association should, when approving such drugs, retain some



control over a reasonable sale price. That may seem like going a little too far socialistically, but it is not. If these people are going to use their discoveries to exploit sickness, they should not receive our support. I have only cited this one instance but there are a dozen others. A few years ago we were prescribing aspirin. It was a good way to administer salicylates without upsetting the stomach. Today, aspirin tablets are mixed with bathtub gin to increase intoxication, and even Amos and Andy are talking about it. All that adding materially to the sum of what people pay for sickness.

One other thing in regard to nursing costs. The nurses do not get more than they are worth but the individual often pays more than he can afford. Here is a point that should be considered, and I am sure the Committee on the Cost of Medical Care will feel that it is diplomatic to put some reference to that subject in its report.

*Dr. Harry W. Albertson:* When I received the program from Dr. Reik I wondered what could come out of it that would be interesting to 3 states, but I want to say now that I think this is one of the best programs I have listened to in attendance at these Tristate Conferences. I must also say to the Chairman that he was extremely modest in his assertion that \$750,000,000 were spent annually in cosmetics, because it was recently brought out by a convention of beauty specialists in Chicago that \$3,500,000,000 were thus spent; which is greater than all the costs of medical care.

I was impressed last night, on picking up my local newspaper, with the inefficiency of the business side of medical practice. A man in my neighborhood, reputed to be wealthy, died recently, and I noticed in the statement of settlement of his estate that his doctor was paid \$4000, covering a long period of illness, and his attorney's fee for work during 5 or 6 weeks in settling the estate was \$6500. That is just an example of how quickly men with business ability get money, while doctors who spend a long time and much patience get little in comparison.

I want to disagree with Dr. Lawrence, while I have much respect for his opinion and his knowledge of the medical profession generally, regarding the statement that we are in a machine age. I had this forcibly brought to my mind a few days ago. I had occasion to call upon 2 doctors, both good fellows. The office of one was composed of a suite of 4 rooms, 3 of which were filled with machinery, and his waiting room held 3 patients. The other man had but 2 rooms, meagerly furnished, but there were so many patients in his waiting room that there was not room to sit down. That man is a very careful practitioner, a man who makes a study of every case and goes into the intricate problems, and whose work is most satisfactory. Unquestionably we need to have the medical profession look to its business ability, and I believe with Dr. Patterson that in educating our younger professional men to realize that typhoid fever and diphtheria were such large factors in the general practitioner's income 25 years ago, he will understand that medicine has done something and stands for something accomplished. Also we should get it across to the people who are thinking disparagingly of the medical profession.

I admire Dr. Donaldson for the stand that he has taken on this matter of paternalism. It requires a good deal of nerve to bring forth a proposition which affects 4,000,000 men, 4,000,000 voters in this country. I sincerely wish that we were able to get that matter out of politics, that we

were able to educate a great majority of those men to the fact that there is something more to patriotism than that which they get for the service they rendered.

*Dr. George N. J. Sommer:* I was very much interested in Dr. Patterson's discussion of the cost of medical education. I recall that it cost my father about \$400 a year to educate me in medicine, and it is costing me \$2500 a year to educate one son at the present time; so I can readily appreciate the difference between the costs of 40 years ago and now. There are so many side issues that enter into the education of a young man today which did not exist then, and it is these side issues of a social nature that really cost money.

I believe that we are largely responsible for some of our difficulties. Our lack of success, in the main, is due to lack of business education, for the principles of success in medicine are the same as in any business. You have to sell yourself as a business has to sell itself, and the men in our profession who have made good have been fellows who were not only skillful and capable but who also were able to sell themselves to the communities in which they practiced. I feel that my own success has been largely due to the fact that I could sell myself to my patients and make them feel that they are getting from me a square deal. If I have accomplished anything in the practice of medicine it is because I have held true to medicine and not permitted myself to be diverted by other things. I started out to be a physician and hope to remain one as long as I live. I have not been a politician nor tried to mix much with politicians, but this fact remains—that if I want something for my friends, from politicians, my reputation as a physician and citizen in my community enables me to get it.

*Dr. J. B. Morrison:* I think the papers we listened to this morning give us some very basic ideas to carry back to our county and state societies. The conclusions that will be drawn from the report of the Committee on the Cost of Medical Care must be promulgated through our profession to the people in such way as will make them realize that of the total cost of medical care the portion paid to physicians is probably less than it should be. I make it a practice, whenever opportunity offers, to speak of this subject to my patients. In such a conversation last week with a man and his wife I gave the figures which Dr. Patterson presented today and showed the small returns to physicians relative to the amount of labor performed and the value of lives protected in the community. The wife said that those figures are excellent and cannot be disputed when you speak of the people as a mass, and of the service of the medical profession as a mass, but when you come to an individual it is different. She said her sister had a child operated on for mastoiditis. The father earned \$2500 a year and the bills from the hospital and surgeon were \$750. I reminded her that her doctor's bill was only \$150 and that the hospital and nurses received \$600. Then I said: "My dear woman, you and your husband have no right under our present economic system, nor your sister and her husband, to spend on the care of that child \$750 for a mastoid operation." She had no moral right to put that child in a private room and require 2 private nurses unless the doctor demanded it. The fault is not with the medical profession nor with the hospitals but it is that the people of the United States have forgotten what economy means, and they must give the best to their children and indulge in luxuries that only

a person with an income of \$25,000, instead of \$2500, could have. If the child had been treated in the ward, the result would have been the same, and if a private nurse had been necessary she would have been supplied. The child could have been brought back to health for half of the money spent, and neither the medical profession nor the hospital should be criticised for what was considered an enormous bill.

We must drive this teaching home to patients whenever possible. It is easy enough to make them understand that the fees are not exorbitant except in certain lines of work.

The matter of carrying this to the public belongs, I suppose, to the profession, and it will never be done in a satisfactory way until it is taken from the hands of the individual physician and done as a business policy by the state societies. I believe that if every state society in the Union were to follow in the footsteps of New Jersey, and spend \$10,000 to \$15,000 a year to carry this education to the public, spend from their own funds for this educational campaign, it would be money well spent and the results would be found as successful as we have found them in New Jersey. This is legitimate advertising; and the business man realizes that returns from his business are in direct proportion to his advertising.

I heartily agree with what Dr. Donaldson has said in his paper. I happened to be in Washington during the debate on payments to soldiers on their Bonus Bill allowance and I sat in the Senate on the evening when the vote was taken. I heard 2 Senators, members of the Legion, criticize that Bill very severely, expressing the opinion that there was a large group of veterans who did not want legislation of that kind, nor believe these favors should be given them by the Government. But, the argument was lost and the vote was overwhelmingly in favor of the bonus, because the politicians were able to make political capital of it. Whether or not 150,000 physicians in the United States can organize and stop this thing is questionable. Perhaps, given 10 years time, with an organized effort and the matter put into the hands of committees to work judiciously, we might be able to influence public opinion but I do not think we can do it as fast as it is being created in the opposite direction. I have been rather severely criticised in New Jersey because of my stand in the discussion of *state medicine*. I have taken the bull by the horns, and brought the matter to the attention of many of the county societies. I believe the time has come when we must realize that state medicine is *more than a possibility*. For a while we were buoyed up by an idea that it was un-American, that the living wage was so high that state medicine could never gain a foothold in America, but in the provinces of Canada where the people are of English, Scotch, Scandinavian stock, where the immigration has been markedly restricted, where they probably have not 1/10 as many people from the Slavic races of Europe as we have in America, where the earning capacity of the average citizen is about as much and where the independent spirit is just as great, state medicine is making enormous strides and it is anticipated by some leading physicians that in less than 5 years it will affect every province. Canada is my native home and as we travel through Canada the only difference from the United States is the fact that we live under a different flag. Now, if they are solving their economic problems in that way it will be brought to the attention of the people of the United States very soon and my plea is that in every state society a committee shall make

a study of this matter and be able to present to the Government at the proper time a plan to avert or guide state medicine, and prevent its being crammed down our throats. A comparison with Austria and Germany shows that the organized efforts of the French physicians wrested from their Government plans that were 50 times more favorable than those in Austria and Germany.

Will state medicine get here? We do not know, but if it is in the offing it will do us no harm to make this comprehensive study of the matter and be prepared to meet it when it comes. It will in all probability only apply to those earning under \$2500 or \$3000 a year. Others will want to retain their independence and have their family physicians just as they refuse now to accept charity in hospitals because they want to pay their way. So, you need not fear that state medicine will ever attain here the volume or proportion it has in Eastern countries. There are several methods of applying it. If the Government starts it, there will likely be a tax on our income. If it is done along the lines of compensation, labor will pay part, the Government part and the individual a part. But, with a people as independent as ours, there is no reason why it should not be carried by voluntary insurance just as we do with life insurance. The average outlay in a family is from \$60 to \$80 for the year's service and it can be readily seen that by the payment of \$80 or \$100 a family can be protected and funds established to meet an emergency. Even those families in America who run on a budget make no allowance for the medical or surgical care that may be imposed upon them, and when an emergency comes they must go to a loan association and borrow money, at 12 to 36%. I feel that in all our states a careful and complete study should be made and plans organized whereby we can offer the Government a solution that will be favorable to the people and the doctors.

*Dr. Henry O. Reik:* I want to begin by thanking you, Dr. Patterson, for the suggestion that the county societies should be urged to devote at least 1 meeting a year to the subject of medical history or biographies of medical workers. We shall recommend that back home and see if we cannot put it into effect next year. We have had some papers on the history of medicine published in the Journal and are at the present time much interested in studying for publication the history of medicine in New Jersey.

I was interested in Dr. Sharpless' comment, calling your attention to a resolution that will be introduced in the House of Delegates of the American Medical Association regarding the control of specialists and specialism. Of course, you are all familiar with the Presidential Address of Dr. John Hartwell, before the Academy of Medicine in New York, and the effort the Academy is now making to classify its members. Dr. Hartwell addressed one of our Councilor District meetings recently on that subject, reported the progress of the work in New York and expressed the hope that it would be taken up elsewhere. Our Second District had that topic up for discussion and I learned from a report of the Secretary of that gathering that they passed a series of resolutions to be submitted at the meeting in June, recommending that the State Society put into effect a plan like Dr. Hartwell proposed in New York. The resolution that is to be introduced at Philadelphia by one of the representatives from Michigan will, I presume, come before the House of Delegates for action and I wanted to ask whether or not the Pennsylvania and New York delegates have taken any action



upon that resolution, and if you know whether it is contemplated to approve and support it or whether there is going to be opposition to it? The question may come up at Asbury Park, as to whether our delegates shall be instructed. If we could ascertain today the position of New York and Pennsylvania regarding that matter, perhaps the 3 state societies can act in unison.

Several speakers have referred to the public educational work. Of course, that is a topic in which I am vitally concerned. We have all read with interest, sometimes with provocation, sometimes with disgust, the articles that have been appearing in the newspapers and magazines. I believe I have only seen two answers published through the magazines, one by Dr. Johnson some time ago and the one by Winford Smith in last week's Saturday Evening Post. I want to ask the question, to what extent you think we should go in trying to get publication of answers to those criticising articles. Is it a wise proposition to secure, and seek publication of, answers to such articles through the same magazines? For instance, if we could get an answer published in the Saturday Evening Post to some of its preceding articles, either along the same line or going further than Dr. Smith did, because in his article he only answered a few points and not those for which we have been most criticised. I once tried to get an answer published in the Forum but the editor answered my letter saying that he could not allow the magazine to pursue a controversial question. That, mind you, after he had published one side of the controversy. Is it, possibly, a better policy to ignore such things?

In the matter of public and professional education, I am much more puzzled as to how to proceed with the medical profession than with the public. It is much more difficult to get the subject before them properly and have it read. Dr. Ross has had an experience this winter, and I can see it in his remarks, about the question of state medicine. During the past 4 months one of my own articles has been published in sections, intended to give an account of the progress of national health insurance laws in Great Britain and France, as observed in my travels, and then such information as I could collect from literature regarding other countries. I have been a bit afraid of one result, that as soon as a medical man reads an article of that sort, and you have presented the facts to him, he jumps at the conclusion that you are supporting the idea of state medicine. I very carefully stated each time, and wrote accompanying editorials on the subject, that I was not advocating state medicine but merely trying to lay the facts before them so that they could prepare for action, either to forestall it or to meet the situation when it does arise, but I hear that some readers have accused me of advocating state medicine. That sort of misconstruing things makes educational work extremely difficult.

*Dr. Walter F. Donaldson* (Closing): I may mention in passing that this is Dr. Mayer's first appearance at one of these conferences and he may understand now why former state society presidents continue to attend these meetings years after they have ceased to serve as active officers. They are welcome, of course, to continue as a part of the organization, but I think their constant attendance is due to the protean character of the discussions; we are not limited in our discussions to the specific subject announced.

As an evidence of how close we may be to *state medicine*, I want to mention briefly a point recently brought out in Pittsburgh by a public

health officer. He mentioned the fact that it would be only necessary to introduce 2 or 3 words into the Workman's Compensation Act to bring about state medicine; they would only have to make that law applicable to *illnesses* as well as to *injuries*.

If the editors who are here today will adopt the suggestion that has been brought out in Dr. Patterson's presentation, and put in parallel column form the contrasts of what the people of this country are spending on tobacco, cosmetics, and movies with what they are actually spending on doctors, hospitals, nurses and dentists, it might make very instructive reading and would be dignified enough propaganda to be hung in the average doctor's reception room. I see no reason why a few facts of that kind, arranged in parallel columns, appropriately framed, should not decorate a doctor's reception room. I would start the pace and hang one in my reception room if I had it, so I challenge you editors to get to work on this.

The problem involved, in extension of the desire to get something for nothing, is one that we must consider not only as physicians but as citizens. Senator Reed, of Pennsylvania, recently exposed a situation in Washington in which he pointed out that some 6 or 8 men, dentists, physicians and attorneys, who were drawing maximum pensions from the Veteran's Bureau, about \$250 a month, because they were supposed to be completely disabled and theoretically, at least, unable to support themselves, were also drawing salaries from that same bureau ranging from \$5000 to \$8000 a year for services rendered. There we have it in high places. How in the world can we blame the ditch digger or the man who cuts lawns for asking if he may be pensioned \$10 or \$20 a month merely because he patriotically served his country, when we have men of type mentioned accepting more.

We are still an individualistic group and I believe we must when necessary put a little bit of sting into our criticism and discuss pensions with our neighbors. When you see a prosperous neighbor go off to a Government hospital to receive service, make him realize that your taxes are contributing to his up-keep while the neighborhood doctor and hospital are suffering because of his action. It is only a question of time before we shall have this tremendous financial burden confronting us.

*Dr. Ross V. Patterson* (Closing): If I may have an opportunity to bring the discussion to a close I would add briefly to what I have already said and perhaps emphasize the main point that I endeavored to bring out. In the first place, let me say that the figures which I offered on the cost of medical care were exclusive of governmental and state agencies with which Dr. Donaldson's paper concerns itself. Let me say again that the \$3,000,000,000 expended by this country for private medical care constitutes 3% of our national income, and that it covers the entire cost of the services of physicians, hospitals and drugs prescribed by physicians, and prescribed by patients or sold over the counter, and of dentists, nurses and quacks. Now, if my arithmetic serves me correctly, 120,000,000 people spending \$3,000,000,000 is \$25 each per annum, and  $\frac{1}{4}$  of that goes to the doctor; that is \$6.25 per annum from each individual in this country goes to the physician.

Figuring it another way, if the physicians receive \$750,000,000 and there are 120,000 of them, that is \$6250 average to each physician; and it checks one with the other.

There is still another way: If there are 120,000 practicing physicians in this country treating 120,000,000 people, that is 1000 persons for each physician, and if they pay \$6.25, that is \$6250 for each physician or \$6.25 each. Now, when we reduce these figures to an analysis of that sort it becomes apparent that the physician is not being over-paid, and that the cost of medical care in this country is not disproportionate to other expenditures. That does not mean at all that there are not inequalities, but, speaking in terms of the average, the situation is not fundamentally wrong. If it is fundamentally wrong, it is because the physician receives less rather than more than he should get. The average income of dentists is greater than that of doctors. Now, is not the solution of the burden of medical care, as pointed out by Dr. Morrison, first of all, education of the profession itself as to the dimensions of the problem, and then to pass that on to their families and have families budget medical care just as they budget their other expenses of rent and coal and food and amusements and clothes, and if on the average each family sets aside \$6.25 for each member it covers the average cost of the doctor's fees, and if \$25 is set aside for each member it covers the cost of all medical care. If we come to the panel system of state medicine, we can easily figure what the return of the doctor should be provided his income is not increased. It amounts to \$6.25 for each physician per individual per year, or \$25 for each member per annum to cover the entire cost of medical care.

Dr. Sharpless asks how we are to get at this. It seems to me there are various ways of getting this conception of the relation between medical institutions and the physician to those for whom they care. Certainly it should start in the medical schools. Perhaps you would be interested if I told you what I have personally endeavored to do in this matter. Some 7 or 8 years ago a student medical society was organized in the institution with which I am connected. It has 28 members made up of senior students. There are 7 meetings a year, 1 each month except the last month of the session. At each meeting 4 students present papers. That means that in 7 meetings all 28 members of the society present papers. Those papers deal with the history of medicine, with the epochs in medicine, with great medical figures, so that each student prepares 1 paper and hears 27 other papers of 20 minutes length. At the end of the year I believe that those 28 men have had a beginning in education as to what medicine is, what its history is, and what it stands for. They have had the inspiration of hearing of the great accomplishments in medicine, and we follow somewhat a chronologic order. We may start with Hippocrates, then we come down to notable figures like Jenner and Harvey and men who have made great discoveries or great contributions. I think it is proper that such study should begin in the medical schools, and should be extended to include the entire student body. My own opportunities at the moment seem to be limited to this particular group. You know some of the medical schools are establishing Chairs in Medical History, and I feel that the value of that would be to inculcate into the graduates a proper appreciation of medicine.

The second great opportunity is in the hospitals. Of the 120,000 physicians in this country, 90,000 are connected with hospitals. Why is it not proper for hospital staffs to concern themselves with this side of medicine?

Dr. Sommer raised a point in regard to the art of medicine. Under our system of medical edu-

cation today the hospitals become a part of the medical educational system. The function of the medical schools is to train men in fundamentals. The function of the hospital and its staff is to train them in the art of medicine. If they lack in the art of medicine it is chiefly because of a defect in hospital training. If the members of the hospital staff could be brought to an appreciation of their responsibilities it would tend to elevate our ethical standards in medicine, and why should they not concern themselves with the ethics, with the history of medicine, first applying it to themselves and meeting once a year with the interns, perhaps having the interns themselves prepare papers? It can be done and it is easy enough to do. My experience with these senior students has been surprising. Some of their programs would be admirable programs to present at county medical societies. They would be instructive and the members would be interested. I am glad that Dr. Reik thinks well of the suggestion. The younger men would be interested and the older men would profit. Then the committees on publicity for the state journals might be avenues for brief articles dealing with some historic man or event. They should be short articles which could be read in about 3 minutes, for longer ones would be passed over.

I am always interested in what Dr. Ross says. I think his views are very sound. Conditions have changed generally and the medical profession must change and adjust itself to changing conditions. The day of the gold headed cane and the periwig, the short trousers and the silver buckles has gone and they have become a matter of historic record. The top hat and frock coat are things that have passed. It is no longer a time for the medical profession to continue in a position of aloofness but it must be active and take part in what is going on. It must make its influence felt in a practical way. I do not believe much in medical lobbies in our state capitols, but I do believe tremendously in county activities through proper committees, discussing problems of medicine with their representatives, and, after all, the Legislature is simply made up of units coming from various communities. The doctors are and should be influential. Merely to sit down and talk with them is often quite enough provided they are well informed, although very often we know they are not. How many of the rank and file of the profession are able to talk intelligently and submit convincing facts to the legislators? Not very many, I am sure. If we are to start out to educate the public we must educate ourselves and our own members and it must be carried on through their offices and in their communities. We need leadership, we need study of these problems, and we need to understand what our relation to these very important changing industrial and economic problems is. We would benefit some by studying trade organizations and their methods, not to adopt them exactly but to modify them to our own purposes, applying our own ethics and our own ideals. Of course, one great trouble with the medical profession is that it is always looking for its defects; that is our training; we are hypercritical. We talk about our mistakes more than about our accomplishments. We find fault with ourselves and it is not strange that the laity finds fault with us and echoes what we say, often adding to it. Our opponents among the quacks distort these things frightfully and we suffer the consequence. We are not given to following leadership. Medicine is the most individualistic of all professions. We do not have enough pride in it. Why, the fact of the



matter is that today the medical graduate is the best educated product of our civilization, and in this country our standards of training are uniformly higher than those of any other country in the world. Here and there are nations that compare but do not equal the standards enforced in this country. And, further, the medical profession is the best educated profession in this country today, compared with law, architecture, engineering or the clergy. The doctor comes up to a higher standard than any of the others. Here and there are those who equal them but the standards of medical education are higher than those of any other profession. A few of the law schools may equal the medical schools as to their standards but as a group they fall far short of it.

Dr. Sharpless is somewhat confused by my figures and I do not wonder. They are not mine but have been gathered here and there and I have remembered them because of my interest in this question of the cost of medical care. They have been published. Dr. Morgan's Committee will bring out in systematic and finished form the facts I have presented. I merely presented them in an endeavor to give you a more or less concrete idea of the subject.

There is one thing that it seems to me is fundamental, that medical men are entitled to decide the extent and the character of their gratuitous contribution to public welfare, but if we are not careful some one else will decide it for us. If we do not study these problems and maintain our leadership in the matter, some one else will be directing us.

Dr. Mayer referred to the influence of the nurses. I am afraid I am quoting figures until I am becoming tedious but this is a fact and the figures show it: here in Pennsylvania we have about 30,000 graduate nurses about half of whom register annually. If we go back to 1890, there were 318 nurses graduated from all the training schools in this country. In 1929 there were 13,000 and in 1950 there will probably be 65,000 at the present rate of increase.

I would express gratification and appreciation of your interest and your discussion and reception of the papers presented.

Dr. Reik extended an invitation to the conference to hold the next autumnal meeting in Atlantic City, which invitation was duly accepted.

Adjournment at 2.30 p. m.

# Communications

## CHILD GUIDANCE

(Abstract of a pamphlet from William Doody, M.D., of Jersey City, Director Traveling Clinic, Catholic Charities of New York.)

The widespread establishment of child guidance clinics has been due to an increasing appreciation of what may be accomplished through applying the principles of mental hygiene to the study and treatment of children who present problems of behavior and personality. Its effectiveness depends largely on an understanding of its functions and proper adjustment of relationship between the clinic and the various institutions with which it coöperates. Therefore, what is a child guidance clinic? A child guidance clinic is an agency for study of the child as a whole, in all its reactions,

particularly toward its environment. A clinic consists of a psychiatrist, a psychologist and a psychiatric social worker, each trained in his or her own field. The chief object of the Traveling Clinic is to aid the Sisters in adjustment of the particular children placed under their care; which means understanding the child and his reactions.

To carry on successful work there must be co-operation on every side. The institution and the clinic must work together to evolve a plan suitable for the children in their present environment. Important in this type of work is an analysis of the history of the child—not only the history of his difficulty, but the history of his family through as many generations as possible, because family history may have a great influence on problems of the individual. A knowledge as to mental disease and chronic physical diseases in the family is important because a child may be handicapped from the start because of a poor physical or mental make-up. Observations by his or her superiors should be noted; e. g., the attitude in the classroom, on the recreation field, in competitive games, in the company of older people, toward playmates and those in authority. Other important factors such as shyness, timidity, stubbornness, temper tantrums, drowsiness in school, insomnia, cruelty toward younger children and how victory or defeat is accepted, should be considered.

Special attention should be paid to the so-called "shut-in" boy or the one who holds himself aloof from the group; the boy who is not fond of outdoor sports or male companions, who may be an apt and model pupil but needs watching because he is apt subsequently to develop a mental condition. A careful physical examination is important, in which deafness and poor vision may be detected, as such defects may manifest themselves in abnormalities of conduct. Staff conferences are valuable because they give an opportunity to all concerned to discuss the problem and to offer a means of interpreting and correcting it. Sisters, teachers and group mothers should feel free to express their opinions regarding the conduct and personality of the children, as the psychiatrist is only an adviser and it is not his aim to disrupt the institutional plan of child care and training.

It is important to note that spokesmen for such well known organizations as the Judge Baker Foundation, in Boston, and the Institute of Child Guidance in New York specifically state that investigation, research and teaching are their major functions. When the situation is studied more closely, it is quite evident that much of the treatment in all institutions is left to the teacher and the group mother, who have been enlightened by the accurate and painstaking investigation of the group.

Each child must be studied as an individual and his particular abilities and disabilities must be understood, and he should be educated accordingly. Many children acquire knowledge easily and represent the so-called superior child who should be recognized as such and be given every opportunity to profit by training in keeping with his mentality. It has been shown that if we place such children in an ordinary class where there is insufficient competition, they become lazy and without ambition because their intelligence is not being given sufficient outlet. Such children do better in a class of superior children. On the other hand, the normal slow child should be placed in a slow progress class so that he is not the victim of unfair competition with the bright group. The bor-

derline and definitely defective children do not require special pedagogic methods but rather a realization that they have subnormal intelligences and cannot hope to go very far in the regular grades. Furthermore, it must be realized that their eventual adjustment in life must be through the teaching of special work in the nature of manual training, because they will have to earn their living through manual work. The placement of these children in vocational classes causes many behavior problems to disappear because they find that, at last, they are given tasks which they can accomplish, and with that comes a satisfaction and happiness which they have never had previously. The placement of these children vocationally after they leave the institution becomes much easier when they have received vocational training before discharge, and will, we firmly believe, result in the elimination of social maladjustments in the community.

We have found through psychologic examinations that normal children are frequently regarded as retarded because of the presence of special disabilities; e. g., reading, spelling and arithmetic, and with correction of these defects through special coaching, they are able to assume their proper places in the school. We have found many behavior problems which have depended solely on the presence of these disabilities.

In conclusion, I would say that the clinic aims simply to establish a better understanding of the individual child, who, because of his conduct, does not seem to be normal, and that the coöperation of all concerned with his training leads to a better understanding of him and the installation of remedial measures. The maxim should be coöperation and team work on the part of all concerned.

#### ADDITIONAL DISTRICT HEALTH OFFICERS

(A letter from D. C. Bowen, Director of Health, New Jersey State Health Department, Trenton.)

On and after July 1, 1931, funds will be available to permit this department to employ four additional District Health Officers.

Appointments will be made from a list of candidates declared eligible by the State Civil Service Commission. That Commission has recently fixed the date of examination of candidates as Thursday, July 30, 1931. The following information regarding these positions has been published by the Civil Service Commission.

##### "District Health Officer—

Salary, \$3000-\$4200 per annum. Open to male citizens, resident of the state for 12 months immediately preceding the announced date for this test. Vacancy—State Board of Health."

#### GORGAS PRIZE TO NEW JERSEY GIRL

A release from the Gorgas Memorial Institute, dated June 26, announced that Miss Margaret E. Beal, a recent graduate from Hammonton High School, of Hammonton, New Jersey, had won the Charles R. Walgreen Prize of \$100 for writing the third-best essay submitted by high school students in the Third Annual Gorgas Memorial Essay Contest.

The subject of this year's contest was—"Keep-

ing Fit: the Gorgas Program of Personal Health." Miss Beal said: "Although a man is apparently in good health he should have an annual health examination and a bi-annual dental examination. Why? For the very same reason that a man's automobile is brought to a garage every 6 months or so. There isn't an automobile existing that doesn't run more smoothly and longer for being looked over, and every human being is just the same."

#### DEFENSE AGAINST MALPRACTICE SUITS

(An item contributed by Dr. Christopher C. Beling, Chairman of the State Society's Special Committee on Medical Defense.)

At the recent Annual Meeting of the Medical Society of New Jersey, held at Asbury Park, the Committee on Medical Defense and Indemnity Insurance included in its report a recommendation that 1 column of each issue of the Journal be reserved for publication of matter pertaining to malpractice claims, and to the means of avoiding, or protecting one's self against, such suits. It was the belief of the committee that members of the society could thus best be kept informed concerning the nature of claims commonly filed, and, through discussion of actual cases, best advised how to prevent similar complications.

In such journal space we could report cases, relate facts, and discuss pertinent questions, for the following purposes:

- (1) Keeping before members the common or uncommon errors that occur.
- (2) The method to pursue to avoid compromising statements.
- (3) How to treat the unreasonable allegations of patients.
- (4) What is expected of the doctor in such cases.
- (5) What coöperation members may expect from the Society.

Case reports may serve many purposes and the Committee urges each member to study these reports so that the number of claims may be diminished, and each doctor may be on guard to avoid, so far as possible, similar mistakes. A short synopsis of the cases will be made, no names or cities will be mentioned, and only the essential facts will be given.

More than 120 cases have been filed in the last 2 years. In 1 case judgment was for a sum of money nearly double the limit of his coverage. Naturally, the doctor had to pay the balance; which amounted to about \$10,000.

Adequate protection best preserves your interest, and by being prepared beforehand you are twice protected. The best interests of the individual doctor and of the Society can be preserved only through the coöperation of all, and it is to that end we dedicate this column of information.

Case 1. This concerned an abdominal operation that was supposedly successful in every way. At the end of the second week the patient returned to her home apparently recovered. About 1 month later the patient called at the doctor's office again complaining of pains in the abdomen. It was decided to operate again. They found that in the previous operation a sponge and an iron ring had been left in the abdomen. The patient suffered shock which caused her death within 30 days.



What system of checking do you require? Do you personally supervise every article used and is each accounted for at the end of the operation? There is practically no defense in such cases, and the doctor should be extra watchful.

## School Health Department

### SUGGESTED LIST OF ACTIVITIES FOR SCHOOL PHYSICIANS

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction,  
Trenton, N. J.

From observation and reports, the following activities are apparently typical of the school physician's program in New Jersey:

- (1) The conduct of an annual health examination of all pupils, as required by state law.
- (2) Conduct of a health examination of all pupils referred to the physician as being in need of further diagnosis.
- (3) Special medical examination of all members of athletic team squads.
- (4) Conduct of periodic inspections of school buildings, together with a report of the findings to the respective principal and the school administrator.
- (5) Recommendation of standards for the sanitation of school buildings, including the work of janitors and helpers in so far as that work relates to pupil health.
- (6) Recommendation of standards for measures governing the control and prevention of communicable disease, including specific instructions to teachers, principals, nurses, and janitors.
- (7) Instruction of teachers by means of meetings and conferences on all matters pertaining to child health concerning which the teacher should be familiar.
- (8) Supervision of the work of the school nurse except those phases for which the school administrative officer is directly responsible.
- (9) Instruction of parents on matters pertaining to pupil health by means of meetings, personal conferences, letters, leaflets and bulletins. The public press may also be used.
- (10) Special examinations of pupils attending all special classes, and supervision of the health activities involved in the conduct of such classes.
- (11) Coöperating with the physical education department in designing health programs for individual cases.
- (12) A health examination of teachers, janitors and all cafeteria workers.
- (13) Supervision of water, milk, and food supplies.
- (14) Conferring with the superintendent of schools and building principal on all school health problems that may arise.
- (15) Assisting in the development of mental hygiene in the schools and providing teachers with the necessary information for putting mental hygiene into practice in the classrooms.
- (16) In some places the school physician is

subject to call in emergency cases. There is some doubt as to the justification of this activity except in emergencies of a serious nature. He should not be called for treatment of minor injuries.

(17) The school physician should state specifically what treatments the school nurse may be permitted to give.

## State Health Department

### DISTRICT HEALTH OFFICERS

D. C. Bowen, Director

New Jersey State Department of Health,  
Trenton, N. J.

These are busy days in the State Department of Health which is about to witness the consummation of a program to strengthen its organization by the appointment of additional district health officers. For more than a decade, the department, with an undermanned staff, has attempted to carry out the important work of looking after the health of a rapidly growing state.

Concentrating its efforts to induce the responsible authorities to provide for additional district health officers, the department about July 1 will witness the fulfillment of its campaign. Governor Larson twice included in his budget recommendations provision for the additional health officers. The Legislature this year voted \$12,600 for at least 4 new district health officers. At present there are but 2. For years, in emergencies, the bureau of local health administration has dispatched its trained but limited personnel to municipalities broadcasting distress signals when communicable diseases got beyond local control. Health officials through their various organizations were on record endorsing the department's program to so district the state that the personnel operating from the bureau of local health administration at the State House would be so thoroughly organized that unusual prevalence of disease could be arrested before assuming epidemic proportions.

Authority has been given for arrangement of examinations for civil service for the district health officers to be named. At present Monmouth County constitutes one health district. The counties of Gloucester, Salem, Cumberland and Camden, exclusive of Camden City, constitute the other health district. Operation of the 2 districts was cited to the law-makers as a reason for extending the system to the remaining 16 counties of the state.

Tentatively the department's program contemplated the grouping of the remainder of the state as follows:

Cape May, Atlantic, and parts of Ocean and Burlington counties; Hunterdon, Somerset, Middlesex and Union; Warren, Sussex and Morris; and, Bergen and Passaic. Hudson and Essex, being practically all urban and having already many well organized city health departments, might not need assistance. Mercer and the northern part of Burlington County could be cared for from the central office of the department at the State House.

## Woman's Auxiliary

### PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION IN 4 ARTICLES

#### No. 3—Southern District

Mrs. C. W. Garrison

The Southern District of the Woman's Auxiliary to the American Medical Association may not have moved so rapidly as regards the number of auxiliaries organized as other sections but the quality of those existing have proved them to be of the greatest value in promoting the aims of the national body.

Alabama reported 3 counties organized last year, and is particularly interested in a health program giving especial attention to children with a tuberculous condition. The group visited in Birmingham was alive and interested, and had the co-operation of its medical society.

Arkansas reported 13 counties organized, all giving attention to a health program and trying to raise an adequate loan fund for medical students only. Some of the counties contributed obstetric kits for use in the rural districts. Many of the auxiliary members in Arkansas are devoting much time and energy to the Parent-Teacher work and are aiding in the various civic and welfare organizations. All will be gratified when the state is organized 100%.

Florida, large areas of which are sparsely settled, has 10 auxiliaries. Some of these are composed of a combination of 2 or more counties. Proof of the quality of these groups was seen when a large medical organization and its auxiliary were entertained in Miami, in 1929. Mrs. J. Rulston Wells, the little woman who now heads the State Auxiliary, furnishes further proof of its aliveness and interest. Florida with its marvelous fruits, flowers, vegetables and wonderful sunshine has just as wonderful and marvelous women in the Medical Society Auxiliary.

Georgia, which has given to the national auxiliary one of its most efficient presidents, Mrs. Allen H. Bunce, has more counties than any other state of its size and has 21 of these organized. They have the full approval and coöperation of the State Medical Association and, having attended that state convention in 1929, the writer will vouch for the fact that no national meeting is more replete with interest and enthusiasm, nor have we found anywhere a greater desire to foster the aims and purposes of the national body. No group of women can possibly have greater courtesy, interest and encouragement shown them and their work than is given to the Georgia auxiliary by the medical men. Mrs. Harrold will bring from her state a goodly report.

Louisiana reports only 2 parishes organized. Taking into consideration the fact that one of these auxiliaries has a greater enrollment than have some whole states, makes us feel that Louisiana will not be far behind in the number of parishes when her final accounting comes in. She is not lacking in interest in any direction because the president of the State Auxiliary, Mrs. Harrold, is of the type who says "We will".

Mississippi reported 4 auxiliaries last year, and again we are able to speak with assurance of our

expectations from that state. The president of the state auxiliary attended the meeting in Detroit and returned to her state with additional enthusiasm and determination to gather into the fold more county organizations. This dream will come true. Mrs. Polk was the first to respond to our first circular letter. She has the approval and encouragement of the medical men of her state to go forward.

We may expect to hear of more interest, as well as more auxiliaries, in North Carolina. Mrs. W. B. Murphy is the President of this great state auxiliary, and though we have before us no report for last year we do know of its interest in the past and believe we may hear the number 5 at least doubled in the next report.

South Carolina shows 12 counties organized, and Mrs. Mauldin was prompt to reply with assurances that better things are ahead for next year.

Mrs. L. M. Sackett now leads the one auxiliary report from Oklahoma, and we feel certain that others will be added before June.

On invitation from its President we had the pleasure of meeting with the Davidson County Auxiliary in Tennessee early in October, and found a splendid group of women earnestly desiring to serve in the most useful way. We found as a member of this auxiliary the State President, Mrs. Milton S. Lewis. While only 4 auxiliaries are reported from Tennessee, they are the counties in which the largest cities are located. The distances are great between, but with the known interest and enthusiasm of the 2 counties visited, Davidson and Shelby, we are assured that Tennessee will bring to the next national meeting a report filled with accomplishments which tend to fulfill the aims and purposes of the auxiliary.

While we were not fortunate enough to meet with the Texas auxiliary, we did have a little visit with the energetic and charming president, Mrs. O. M. Marchman. Texas, the mother state of the Medical Society Auxiliary as it is now recognized, has 35 county auxiliaries, and with a live, interested organization chairman, such as Mrs. J. T. Moore is proving herself to be, others will be added before the next meeting in May. Texas auxiliaries have earnestly promoted a health program, always working shoulder to shoulder with the fine progressive men of the medical association who, in turn, endorse the auxiliary movement and are unstinted in encouragement to further development of the organization.

## County Society Reports

### ATLANTIC COUNTY

#### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The stated monthly meeting of the General Staff of the Atlantic City Hospital was held May 15, with Dr. Milton S. Ireland, President, in the chair. The medical service of Drs. D. Ward Scanlan and Harold S. Davidson was reported by Dr. Davidson, owing to the absence of Dr. Scanlan. The service embodied the months of November and December 1930 and January 1931. Following a classified portrayal of the 191 patients admitted and a discussion of the mortalities, Dr. Davidson continued:



Of especial interest were the pneumonias, of which there were 14 cases, lobar and bronchial, not including tuberculous pneumonias, with 3 deaths, a mortality rate of 21%. This year we treated our pneumonias with daily, or, in some cases, twice daily, intravenous injections of concentrated glucose solution, to the exclusion of all other medicaments, and we believe our results justify continuation of that plan. Until the last few days of the service it was thought we would get through without any pneumonia deaths, but all of a sudden we had the 3 fatalities. This fact alone shows how impractical it is to draw conclusions from a series of cases as to the value of any special plan of treatment. It may be that this year the pneumonias during the early months of the winter were especially avirulent. At any rate, we believe the plan should be tried further in order to get some basis for comparison with other plans of treatment on a larger series of cases.

### MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Society held an "Outing" on June 18, just a regular out-of-doors picnic in the grove at the Hopewell Valley Golf Club. The Committee of Arrangements, Drs. Pierson, Seely, North and Hutchinson, definitely determined that any attempt made at scientific discussion on this occasion would only result in failure because so many members had availed themselves of the pleasure and instruction to be gained through attendance upon both the State Medical Society Convention, and the A. M. A. meetings recently held.

Golf and quoits occupied most of the afternoon; the interval being enjoyed around the buffet lunch counter tastefully prepared. Many very useful prizes were awarded to winners in the several contests which were hotly waged in and about the rough and hubs.

### MIDDLESEX COUNTY

Samuel G. Berkow, M.D., Reporter

The June meeting of this society was held at the Middlesex General Hospital, New Brunswick, on June 26, at 9 p. m., with Dr. William H. McCormick presiding.

Members present were: Drs. Nafey, McKiernan, Rowland, Johnson, Brown, Feher, Klein, McCormick and Berkow.

Minutes of the previous meeting were read and accepted.

Dr. McKiernan reported for the committee on amending the constitution of the society. Through the assistance of Dr. Brown he had obtained a copy of the Constitution of 1884, which is still in effect. By-Laws of 1816 have been lost. To provide against such loss in the future, the society voted, on motion by Dr. Nafey, seconded by Dr. Rowland, to make the Voorhis Library, of Rutgers University, repository of the important documents of this society.

Dr. McKiernan read the constitution and the committee's recommendations. Further changes were suggested by various members and, on vote, were incorporated in the committee report. The revised constitution will be submitted at the September meeting.

### Medical Section of Rutgers Club

John H. Rowland, M.D., Secretary

The annual outing of the Medical Section of the Rutgers Club was held at 6 p. m., Wednesday, June 24, at the Ross Fenton Farms, Asbury Park, with 24 members and 2 guests present.

After various forms of enjoyment in the afternoon, including the boardwalk promenading, bathing, golf and other recreations, the members enjoyed an excellent dinner. They also enjoyed the famous entertainer, Luke Burnett, who acted as head-waiter, and who was successful in aggravating 7 or 8 members taken by surprise because unaware of this unusual form of entertainment. Afterward, Mr. Burnett was introduced in his real personality and told many humorous stories, to the great satisfaction and pleasure of all those present. Besides this form of entertainment, the Ross Fenton Farms presented music and vocal selections.

At a late hour the members adjourned to their homes, feeling that this was one of the best annual outings they had experienced.

### MONMOUTH COUNTY

W. Von Oehsen, M.D., Reporter

The May meeting of the Monmouth County Medical Society was held at the Garfield-Grant Hotel, Wednesday evening, May 27, with Dr. W. K. Campbell in the chair. Minutes and communications were read and accepted.

Dr. R. W. Baeseman was elected to membership. The applications of Drs. Davies, Neiderhoffer and Jordan were read and referred to the Board of Censors.

Dr. R. A. MacKenzie, chairman of a committee which met with the committees from the State Medical Society and the New Jersey State Homeopathic Society to inspect the Dr. E. C. Hazard Hospital and School of Midwifery, reported as follows:

"At the conclusion of the inspection and following a meeting in which a thorough discussion was held, it was unanimously voted to sustain the action of the State Board of Medical Examiners in denying approval of Dr. Hazard's School of Midwifery, such action having been recorded following inspection of the Hospital and School in April 1930.

No students of midwifery are at present enrolled at the Hazard Hospital, those taking the course having discontinued their studies in 1929 following the action of the State Board in refusing admission to examination of 3 graduates of this school. Dr. Hazard had been formally notified, following inspection and consideration of his Institution in 1925, that his school of midwifery could not be approved and the action of the State Board in refusing admission to the above mentioned candidates in 1929 has been sustained by the courts.

In the meeting of May 14, 1931, of the joint committee including your representatives, the questions brought up for discussion were: (1) The need of midwives in New Jersey; (2) the character of equipment and availability of material for obstetric practice and practical teaching at the Dr. E. C. Hazard Hospital; (3) adequacy and accuracy of the teaching curriculum proposed for the school of midwifery at this institution. It was decided

without dissenting vote: (1) That need for augmenting the ranks of midwives in this state and locality is not great; (2) that the equipment and facilities at the Dr. E. C. Hazard Hospital are not worthy of highest approval; and (3) that insufficient evidence was demonstrated as to the quality and sufficiency of theoretic and practical teaching along standardized and modern lines to select this institution for the training and graduation of midwives."

Dr. Stanley Nichols recommended that the revised Constitution and By-Laws be adopted by the County Society. His motion was seconded and carried.

Dr. J. Wiener, of Asbury Park, gave the paper of the evening on "heart failure" which was well received.

### June Meeting

The June meeting of the Monmouth County Medical Society was held at the Log Cabin Inn, Pleasure Bay, Wednesday evening, June 24. No business was transacted except the election to membership of Drs. Sydney Neiderhoffer, L. E. Davies and J. B. Gordon.

The members had the pleasure of hearing talks by Dr. John F. Hagerty, President of the State Medical Society; Dr. W. H. Herrman, of Asbury Park, and Judge Ward Kremer, of Asbury Park.

A steak dinner and dancing were enjoyed by the members and their wives.

### MORRIS COUNTY

Marcus A. Curry, M.D., Reporter

The quarterly meeting of the Morris County Medical Society was held the evening of June 18, in the recreation hall of the employees' cafeteria building at the New Jersey State Hospital, Grey-stone Park.

President Sutphen presided over a gathering of members and guests numbering about 40; among the guests being President Hagerty of the State Society.

Routine matters were dispatched, including reading of the minutes of the March meeting and 2 subsequent special meetings, and the proceedings of the executive committee. Among items of the latter record was the resignation of Dr. Emory as Treasurer, which was accepted with regret.

The applications of Drs. Falvello and Ferris, having been reported upon favorably, were voted upon and they were unanimously elected to membership. The application of Dr. Attilio Galasso, of Morris Plains, was duly referred to the credentials committee.

A communication was read by the secretary from Dr. Julia Mutchler thanking members for their support at the recent primary, at which she was nominated for Assemblywoman, and bespeaking a continuance of support through the November election.

The Nominating Committee submitted the following recommendation of officers for next year, to be voted upon at the annual meeting in September: President, Fletcher I. Krauss; Vice-President, Frank N. Pinckney; Treasurer, George J. Young; Secretary, Albert J. Ward; Reporter, Marcus A. Curry; Historian, Henry W. Kice. For councillor members of the Executive Committee, Drs. Sutphen, Frost and McElroy. For members of the House of Delegates of the State Society

for 3 years, Drs. Teskey and Teller; alternates, Drs. Gilbertson and Truax. For member to represent the society on the Nominating Committee of the State Society, Dr. Costello.

President Hagerty gave a very interesting talk on matters of fundamental interest to medical men, during which he touched upon the subject of control of specialization and expressed his views, and the steps that have been taken to give full consideration to the proper handling of this matter that is now inviting much thought, and stressing the protection that should be given to those already holding the rights they have earned and which have been bestowed upon them.

Dr. Costello, being called upon by President Sutphen, gave a lucid account of the state medical society meeting at Asbury Park, and discussed very clearly many points of present and future interest. After dwelling upon the value and importance of the Journal and of the work of the Executive and Field Secretaries, Dr. Costello presented a resolution which was unanimously adopted, as follows:

"Mindful of the high standard attained by our State Journal and appreciating the excellence of the work done by our Publication Committee and our Executive and Field Secretaries, we respectfully request that no measures be instituted by the Board of Trustees which will diminish the resources or limit the activities of those departments."

Dr. Lathrope gave a very interesting talk along the lines of specialization and introduced a resolution which was unanimously adopted:

"That the Morris County Medical Society is opposed to any legislative regulation in the realm of specialization."

The scientific chapter of the evening was presented by fellow members, Dr. Krauss presenting 5 case reports with x-ray plate illustrations, of "gastric crises in infants and children", and Dr. Costello 2 very "interesting fracture cases", one chiefly to show use of the Goldthwait apparatus in a fracture of the vertebra, the other an "unusual case of enlarged spleen with abscesses, and abscesses of the liver".

After adjournment refreshments were enjoyed in the cafeteria underneath the recreation hall.

### SOMERSET COUNTY

Robert Scully, M.D., Acting Reporter

Members of the Somerset Hills Clinical Society, composed of physicians attached to the new Veterans' Hospital at Millington, held a joint meeting with the Somerset County Medical Society at the hospital on Thursday, June 11. The visiting physicians were accompanied by many of the members of the Woman's Auxiliary to the County Medical Society, and a most interesting program was enjoyed. All of the visitors were first conducted through the various departments of the hospital. The ladies were then entertained at cards and with music in the beautiful new Recreation Hall which has been erected on the reservation. Music was rendered by an orchestra composed of a group of patients, assisted by Miss Betty Booth, of Basking Ridge, who sang many delightful songs, and also



by Mr. "Boz" Cook, of the Triangle Club of Princeton University, and Mr. Earl Gardner.

Meanwhile, the physicians were given an opportunity to see medical cases of interest in another department of the hospital. Dr. Lester W. Day presented a series of dementia paralytica cases; Dr. A. C. Delacroix a series of manic cases; and Dr. D. M. Gardner a most unusual series of neurologic cases.

At 5 p. m. a buffet supper was served in the Recreation Hall, which had been banked with palms and flowers for the occasion. The hostesses were Mrs. T. F. Neil, Mrs. D. M. Gardner, Mrs. R. L. Eltinge, Miss Helen Powell and Miss Mary A. Neill. Assisting were Miss Elizabeth Brown and Miss Lingenfelder. Tea was poured by Miss Moxley, Miss Borzner, Miss Berkshire, Miss Hudson, Miss Brown and Miss Lingenfelder. Much of the success of the function was due to the efforts of Miss Mary A. Neill, hospital dietician, and the whole-hearted coöperation of the workers of her department.

## Obituaries

### IN MEMORIAM

JAMES HUNTER, JR., M.D.



#### SINCE I MUST DIE

(By Scanmon Lockwood)

If death must be my lot, my knee I bend  
That I die quickly and alone I die;  
On no fond breast my parting soul rely,  
But sink as traveler at journey's end  
And all alone to Erebus descend,  
Without one tear, without one parting sigh;  
So much for me, but ah, for you, my friend,  
I ask it that the fates may thus defend  
Your heart from scourging pain of vigil long;  
Slow day and night and week and month and year;  
Ordeal too much for soul or body strong;  
Thus I would spare all those who are most dear,  
Thus would I join grim Charon's eager throng,  
Quickly to go sans sorrow and sans fear.

On Monday, June 1, 1931, Dr. James Hunter, of Westville, New Jersey, died after a sudden attack of coronary thrombosis, at the age of 65 years.

Dr. Hunter was born in Philadelphia, January 14, 1866, the son of James Hunter, Sr., and Martha M. Church. He was educated in the Philadelphia public schools and later graduated from the Philadelphia College of Pharmacy. He entered the University of Pennsylvania Medical School in 1885, graduating in 1888 as the youngest member of the class.

He began his practice in Westville on December 5, 1891, later devoting most of his energies to the treatment of eye troubles.

He was a surgeon on the staffs of the Wills and Jefferson Hospital eye clinics from 1904 to 1920, retiring on the death of his chief, Dr. William Sweet. As a result of his work in those clinics he established a wide reputation as an eye specialist.

Dr. Hunter was a past-president of both the New Jersey State Medical Society and the Gloucester County Medical Society, and at the time of his death was Secretary of the Board of Trustees and also a member of the Welfare Committee of the State Medical Society.

During the World War he served as Chairman of the Medical Advisory Board for Gloucester County and was one of the founders of the Physicians' Association of Woodbury and vicinity. He was a member of the American Medical Association and the Medical Club of Philadelphia.

In politics Dr. Hunter was a Republican and served 3 terms as coroner of Gloucester County.

He is survived by his widow, Elizabeth; a daughter, Avis, the wife of Carl F. Rumpf, of Germantown; and a son, James Hunter, 3rd, a junior in the Woodbury High School.

#### RESOLUTIONS OF THE GLOUCESTER COUNTY MEDICAL SOCIETY ON THE DEATH OF DR. JAMES HUNTER, JR.

RESOLVED, that the Gloucester County Medical Society records with the utmost sorrow and regret the sudden death of our esteemed fellow member, Dr. James Hunter, Jr., of Westville, New Jersey, on Monday, June 1, 1931, at the age of 65 years. Dr. Hunter had suffered from a severe cardiac attack 3 months ago, and had apparently recovered, when suddenly stricken with a fatal heart attack.

Dr. Hunter was a past-president of the Gloucester County Medical Society, and also of the New Jersey State Medical Society, and was Secretary of the Board of Trustees of this latter body at the time of his death. He also served the State Medical Society as a member of many important committees and had for many years been one of the most influential members of that body. During the World War, Dr. Hunter served as chairman of the Medical Advisory Board for Gloucester County. He was one of the founders of the Physicians' Association of Woodbury and at the time of his death was an active member of the Medical Club of Philadelphia.

On January 14, 1866, Dr. Hunter was born in the city of Philadelphia. He was educated in the Philadelphia public schools and the Philadelphia College of Pharmacy. In 1888 he was graduated from the University of Pennsylvania Medical College and attained high distinction in his class. From 1904 to 1920 Dr. Hunter was a surgeon on the staffs of the Wills Eye Hospital and the Eye Clinic of the Jefferson Hospital, of Philadelphia, where he established an enviable reputation.

Our colleague began the general practice of medicine in Westville, on December 5, 1891, but later specialized in diseases of the eye.

By his skilful and faithful service to a large clientèle throughout Southern New Jersey, and particularly to the community in which he resided, he endeared himself to all with whom he came in contact, for Dr. Hunter emulated in his daily life and in contact with his patients the lovable characteristics of the Great Physician. He has left a place in the affectionate regard of those to whom he administered, which will be extremely difficult to fill.

By his constant and active interest in the Gloucester County Medical Society, he had been a power for good; his association with his fellow members had always been kind and considerate. The ethics of the profession always maintained a high place in his regard and he was always a source of inspiration to those of the profession with whom he came into contact.

BE IT FURTHER RESOLVED, that we, the members of the Gloucester County Medical Society, have lost a distinguished, a faithful and a beloved member; that the state, the county and the community which he served so long and faithfully, has lost a beloved and eminent physician; and we hereby express our sorrow and profound sympathy to his family in its bereavement.

BE IT FURTHER RESOLVED, that a copy of these Resolutions be sent to his loyal and devoted wife, Mrs. Hunter, and that they be spread at large upon the Minutes of this Society.

Dated June 4, 1931.

Henry B. Diverty,  
William Brewer,  
J. Harris Underwood,  
Committee.

#### Resolutions on the Death of Dr. James Hunter, Jr.

Adopted by the Board of Trustees of the  
Medical Society of New Jersey

The Trustees of the Medical Society of New Jersey record with deep sorrow and a feeling of irreparable loss the passing of our beloved member, Dr. James Hunter, Jr., at his home in Westville, Gloucester County, at the midnight hour of June 1, 1931.

Stricken with an attack of angina pectoris a few months ago, from the effects of which he had apparently recovered, he was actively engaged in preparing to attend our recent meeting at Asbury Park, and his unfinished report as Secretary of this Board, on which he was working when the call came to join Sproul, English, Johnson, Chandler and Dickinson in the Great Beyond, was found on his desk.

For years his chief professional delight had been association with these past leaders and with the

present members of this Board. Because of his integrity, his sterling character and his charming personality, a deep bond of friendship had grown up between him and his associates on this Board.

Dr. Hunter was President of our Society in 1922, a member of the Board of Trustees for 15 years and its Secretary since 1925. He loved our Society as he loved his profession, and scattered through our "Transactions" in the past are the records of his devotion. It was during his term as President that the recent renaissance in the Medical Society of New Jersey developed, and to him, in no small degree, was due credit for much of what has been accomplished.

Members of this Board, of the Fellows, the State Board of Medical Examiners, the Judicial Council, Chairmen of Standing Committees, and a host of physicians from all over the state, attended the funeral services to pay their last respects to one who had been a friend to them all.

On behalf of our Society, we express the universal feeling of grief and loss at the untimely passing of our friend and counselor.

RESOLVED, That this tribute be spread upon our minutes and a copy sent to the bereaved family.

John B. Morrison  
Harry R. North  
John F. Hagerty.

BLAIR, James A., a practicing physician in Newark for 30 years, died at his recently acquired home in Binghamton, N. Y., May 29, 1931.

Dr. Blair was born in Scotland and came to this country as an infant with his parents. He had lived in Newark nearly all his life and practiced many years at his home at 404 Avon Avenue. Some time ago he retired from active practice and moved to Binghamton with his wife.

He was a lifelong member of St. Luke's Methodist Episcopal Church, a member of the Essex County Medical Society, the New Jersey State Medical Society and the American Medical Association.

VOORHEES, Nathaniel Whitaker, formerly of Elizabeth, died at his home in High Bridge, June 3, 1931.

Born December 4, 1859, the son of the late Nathaniel Whitaker and Naomi Leigh Voorhees, he was a graduate of Rutgers University and the University of Pennsylvania, from which he received his medical degree. After graduation, he was resident physician at Blockley Hospital, Philadelphia, and later practiced medicine in Danville, Pa., before coming to Elizabeth. In that city, Dr. Voorhees held an eminent position in his profession. He was a member of the medical staff of the General Hospital. A descendant of old American stock, he was of distinguished appearance. He was widely read on many subjects, and well informed on problems of economics and domestic and international politics.

About 18 years ago Dr. Voorhees retired from active practice and with his brother, the late Foster M. Voorhees, former Governor of New Jersey, went to live on his country estate "Hill Acres", at High Bridge. He resided there until his death.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 8

ORANGE, N. J., AUGUST, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## THE CULT OF ASKLEPIOS

WALTER B. STEWART, M.D.,  
Atlantic City, N. J.

In the early days of Greece, when the gods of Olympus still roamed the earth, and history was recorded by word of mouth rather than on stone or parchment, there lived one by the name of Asklepios, in later Roman times called Aesculapius. Little is known of his life as a man among men. In the time of Homer, about the tenth century B. C., he had been dead for 200 years but had not yet been raised to the level of a god, being known merely as a famous chieftain of Thessaly who was well versed in the art of healing and went abroad doing good and performing miracles. Homer, in the Iliad, spoke of his sons, Machaon and Podalirius, who not only were military surgeons at the siege of Troy but also commanded a fleet of vessels. Other authors mentioned his daughters, Hygieia and Panacea, who later became assistants in the temple rites and curators of the sacred snakes. Asklepios received his medical knowledge, as did also Achilles, Jason, and other worthies of the day, from the centaur Cheiron, son of Saturn, who in turn had been tutored by Apollo, the Homeric god of medicine and the father of Asklepios. Apollo could cause plagues and epidemics by his arrows, and could heal the wounds and diseases of the gods with the root of the peony. On this account, his name was closely associated with that of Paean, the physician of the gods, in the form of Paean Apollo, and to him chorals

or paeans were sung. But it was his son Asklepios who was the *real* healer of men. That he was considered worthy of deification as god of medicine, was fitting testimonial to his outstanding ability in the healing art and to the high esteem in which he was held by his contemporaries.

We have received a fascinating account of the birth of Asklepios from the poet Pindar. Apollo once wooed and won a fair maid, Coronis, by name, but she, unsatisfied with the delights of one such love, and despite the fact that she was with child by Apollo, encouraged another suitor, a shepherd lad of Thessaly. The snowy raven, favorite bird of Apollo, espied this scandal and reported it to his master. Such was Apollo's jealous rage that he turned the snowy raven coal black, seized his bow, and shot a deadly arrow through the heart of Coronis, his love. But when he saw her on the funeral pyre, before the flames had yet reached her dead body, he relented, and from her womb snatched the living babe, Asklepios. Thus was performed the first Cesarean section, long before the time of Cesar. One day the infant Asklepios was found on a hillside by a herdsman, sucking peacefully at the teats of one of his goats and guarded by a dog. Ever after the goat and the dog were considered as animals sacred to Asklepios.

Another legend told of the discovery of the secret of restoring the dead to life. One day, while walking in a garden, Asklepios saw a snake mourning over the dead body of another snake. Soon the living one began to crawl about the garden and examine various plants. It broke off a branch of one herb,

chewed the leaves, and forced the quid into the mouth of the dead animal. Immediately life returned and the recovered snake crawled away to its nest. Asklepios, marveling at what he had seen, took careful note of the herb used.

Asklepios performed so many miracles, and restored so many of the dead and the dying to life, that Jupiter, fearful lest he thus deprive Hades of all its shades and produce a race of immortal men on earth, hurled upon him a lethal thunderbolt. His father, Apollo, took revenge by killing the Cyclops who had forged the bolt.

The cult of Asklepios originated in extreme simplicity. A number of devotees of the new god of healing, enthusiastic patients who had been cured, and their friends, gathered about a mineral spring on the side of a beautiful mountain near the little town of Tricca in Thessaly. There they erected a simple temple to Asklepios, containing his statue and a few sacred serpents; they hung up their crutches on the walls, just as convalescents have always done at famous shrines; and they appointed one of their number to officiate as priest in the worship of the god. The priest was preëminent; the physician had hardly yet appeared in the temple.

The fame of the god and of the shrine, to which invalids began to flock, spread so rapidly throughout Greece that many other temples were established, the most famous of which were those at Epidaurus, Cos, Cnidos, and Pergamos. These temples, or asklepieia, became popular sanatoriums managed by trained priests, the asklepiads, and not unlike many health resorts of modern times. They were located in elevated spots, preferably on the side of some mountain, by a medicinal spring, amidst inspiring natural beauty. The grounds were laid out with woods, lawns, and fragrant gardens. Cypress, oak, and olive trees afforded ample shade. The spring was essential for purification of the patient and treatment of many of his ailments. About the temple there were erected beautiful and elaborate buildings, often among the noblest and most imposing examples of Grecian architecture. Ornate in detail, they were adorned

with the most admirable works of the painters and sculptors of a country so famous, even then, for cultivation of the fine arts. The ground plan would resemble in many respects that of a modern college campus. Even the stadium, the gymnasium, and the theatre were there as parts of the course in occupational therapy. Upon the walls of the temple were hung the votive tablets, recording the name of the patient, his disease, and the manner in which he had been cured. Many of these tablets have been discovered at Epidaurus. Hotels were built for the accommodation of the hosts of visitors. Between 200 and 300 asklepieia are known to have existed in various parts of Greece. Such was the popularity of the temple cult at these health resorts that it spread rapidly to the urban centers. It was introduced into Athens by Sophocles, in 420 B. C., and into Rome in an effort to check a raging plague, in 293 B. C.

As the cult grew in influence and complexity, some of the priests assumed more purely medical functions, although the majority performed only devotional and sacrificial duties. A few extramural physicians, bringing with them a knowledge of rational, scientific medicine, were added to the temple staff. It was assuming more the nature of a great hospital center. The temple doctors, the asklepiads, in the century before Hippocrates, were sharply differentiated from other Greek physicians by a rigid organization which found expression in definite rules and formalities. They were free to practice their calling, at their own discretion, outside the sacred precincts or even in foreign countries. At first they inherited position by primogeniture, but later were chosen by lot at annual sessions controlled by the state and its politics. They jealously preserved the prerogatives of caste and exercised their privilege with all that impressive ostentation practiced universally by the priesthoods of all mystic cults. The asklepiads offered not treatment, but cures; and the unfortunate incurable was ushered from the temple as an outcast from divine mercy. Hence, inasmuch as the cure depended not upon the sagacity and experience of the heal-



er, but upon the righteousness and purity of soul of the patient, the asklepan priest was infallible.

The patient, on admission, was put through a routine course of treatment. His imagination having been tuned to the proper pitch by the inspiring scenery, by the presence of the god in effigy or in symbol, and by narration of his famous cures, the patient sacrificed to the god a cock or a ram, and offered up appropriate prayers. He was further purified by a bath from the mineral spring, and by massage, inunctions, and other physico-therapeutic measures. He received instructions in dieting or fasting. Then he was inducted into the special rite of incubation or temple-sleep, which consisted of lying down to sleep in the sanctuary for 1 or 2 nights, of dreaming, and of having the dream interpreted by the priest who would then prescribe the appropriate remedy. If the patient was not a good hand at dreaming, there were professional mediums who would dream to order for a small fee. If the patient happened to be awake during the night, the priest in the guise of the god presented himself before the patient to administer medical advice. If the treatment was successful and he was cured, the patient presented a thank offering to the god, usually a model of the diseased part in wax, silver, or gold; and he hung up his votive tablet on the walls of the temple. Thus the priest was the center of faith of the patient, effecting his cures by advice and guidance, and depending for his success upon the credulity of those who sought his aid. Several examples of these miracles which have been preserved for us may be mentioned here:

(1) A skeptic, all of whose fingers save one were paralyzed, came to the shrine, and during his period of incubation dreamed of playing at dice, during which the god straightened his fingers.

(2) Cleo had been with child for 5 years. After 1 night in the dormitory a son was born, who in the morn washed himself with the sacred waters and betook himself from the shrine.

(3) Pandarus came seeking to have removed some letters branded upon his fore-

head. He dreamed that Asklepios bound a fillet about his head and bade him take it off and dedicate it to the god. Lo! In the morning, the letters were no longer on his troubled forehead but had been transferred to the fillet.

(4) Thyson, the blind boy, had his sight restored through the licking of his eyes by a dog of the temple.

(5) A man with an ulcer of the toe was cured by the forked tongue of the sacred serpent while he lay asleep.

(6) Apellas underwent 9 days of treatment for indigestion. The first item of advice was not to get angry, following which there were directions as to diet, exercise, bathing, the making of sacrifices, and the necessity of paying the honorarium. In the event of his failure to make an adequate monetary compensation, the disease and suffering of the patient could be restored to him.

Irrespective of the reality of the cures effected at these places, one would hardly consider the methods as contributions to medical therapeutics. The routine of treatment is so strongly bound up with divine intervention that it is difficult to distinguish any of the ancient art of medicine in it. It belongs rather to the realm of comparative theology. The popularity of the cult was due in part to the wisdom and sympathy of the priests, but mostly to their close association with so powerful a deity as Apollo.

Parallel with the development and expansion of the cult, scientific rational medicine was gathering experience and formulating its rules. Many of its principles originated in Egypt, Chaldea, and Persia, and were carried through maritime channels to the lay practitioners of pre-Hippocratic Greece. Hippocrates was indebted to Egypt for much of his knowledge. His accurate clinical pictures closely resemble those in the last section of the Ebers papyrus on the subject of tumors; and his famous oath corresponds in sentiment and expression to some of the ethical precepts of the ancient Egyptian physicians. However, later Egyptian medicine was entirely in the hands of the priests, while Greek medicine, even in the Trojan War, long before the time

of Hippocrates, was largely free from priestly domination. Hippocrates, living between 460 and 376 B. C., developed his great system of rational medicine at a time when temple medicine was exercising its greatest influence. Greek medicine by no means originated with Hippocrates; in reality, he represents to us the embodiment of a period in which he forms only the most striking figure. After he had received what knowledge he could obtain from the temple of Cos, of which he was a graduate, he did not disdain to travel among the secular group of physicians and learn their art. It is most significant that he, during the period in which the asklepiads were most numerous and influential, was practicing and teaching methods in which the religious and mystic element was almost negligible. In his writings he did not mention the temple at Cos, although his home was at its very doors and his education was received within.

Rational medicine and temple medicine were not necessarily competitive, but perhaps the asklepiads served as a supplement in attending to those sufferings of humanity which transcended in their obscurity the wisdom of rational medicine. The great importance of the lay practitioner can be realized in the fact that many Greek cities maintained state physicians, and that both Homer and Xenophon told of men of great surgical skill. Even in the sixth century B. C. Athens boasted of her public health officers. Democedes, a public physician of Athens, had an annual salary of \$2000. Although the temples at first represented depositories of empiric knowledge, they later became hot-beds of jugglery and deception. No element of charlatanism entered into the cures of Hippocrates. When rational means failed, he left the cure to deity and the "*vis medicatrix naturae*", which force he recognized as the great physician. Our word "physician" is derived from the Greek word "phycis", meaning nature. The legitimate province of his art as a physician he felt was merely in the aiding of this innate healing power of nature.

In the fifth century, when the art of thinking was being developed to such a high point among the Greeks, philosophy came to the

aid of medicine and rescued it from the clutches of religion. The ancient Greek physicians believed that all disease was of divine origin. They knew about disease only what could be perceived with their unaided senses; all else was conjecture and hypothesis. However, this new philosophic attitude endeavored to reduce all thought of phenomena to a uniformity of idea which led only to guess work and to neglect of fact. Pythagoras, Empedocles, and other philosophers, taught that the macrocosm, or the world as a whole, was composed of fire, air, earth, and water; and that the microcosm, or individual unit, was of blood, mucus, yellow bile, and black bile. Health was said to consist in a harmony or due admixture of these humors; disease, in a disharmony or imperfect admixture. For 2000 years this humoral pathology dominated the profession. Even in the Hippocratic writings the nature of disease was still under this influence of the philosophers. But, on the whole, the Hippocratic school freed medicine of religious and philosophic dogmas and assumptions, and stressed accurate observation and knowledge from accumulated experience.

Pythagoras, Empedocles, Democritus, Socrates, and other philosophers of that day, were also distinguished physicians. Few of their medical writings have been preserved, although we know that Democritus wrote a treatise entitled: "On Those Who Are Attacked with Cough After Illness". Plato expressed some interesting views on the limitations of temple medicine. He wrote that Asclepius did not instruct his descendants in valedinarian arts, because he knew that in well ordered states individuals with occupations had no time to be ill. If a carpenter felt sick, he asked the doctor for a rough and ready cure—an emetic, a purge, a cautery, or the knife—these were his remedies. Should anyone prescribe for him a course of dietetics and tell him to swathe and swaddle his head, and all that sort of thing, he could see no good in a life spent in nursing his disease to the neglect of his customary employment. Therefore, bidding goodbye to this sort of physician, he resumed his ordinary habits and either got well and lived and carried on his business, or,



if his constitution failed, he died and had no more trouble.

An Athenian father of the fourth century worried about the poor health and the suspicious cough of his adolescent boy, had recourse to 3 procedures: he could ask the advice of Hippocrates or some brother practitioner, he could resort to the asklepieion in Epidaurus, or he could send him to the palestra of Taureas for a systematic course in gymnastics.

The cult of Asklepios is essentially a religious sect and unmitigably pagan. It is built upon the foundation of a mythologic hero or deity, a legendary figure from among those earth spirits who were ancient even to Homeric audiences. Such an earth spirit was the serpent, dwelling in mother earth and hence symbolic of her. Appearing to be wiser, stronger, subtler, and longer lived than man, it inspired fear and awe, thus awakening religious impulses. It became a sacred and mystic animal, endowed with magic powers relating to dreams, prophecies, and healing. So, naturally, it was an almost constant associate of Asklepios and his cult, and became a symbol of medicine and the medical profession. The serpent was often worshipped as the god himself. It was carried to Rome in 293 B. C., swam ashore, and indicated by the point of its landing on an island in the Tiber the site on which should be erected the temple to Asklepios. The care of these large, yellow, non-poisonous, trained serpents was an important function of the priest and his assistants. It was believed that the cleansing of one's ear by the tongue of a serpent brought about supernatural understanding in the patient. Many ulcers and sores were healed by licking of the forked tongue. The belief in the medicinal qualities of snakes has carried down to the present day. Do we not find bottles of rattlesnake oil for the cure of all ailments in our best drug stores?

You have all seen the statue of Asklepios standing at the head of the staircase in the library of the College of Physicians in Phila-

delphia. He is represented as a virile man with bared chest, and refined, thoughtful countenance, garbed in a flowing cloak, and holding a club-like staff around which coils a single serpent. This staff doubtless had an Egyptian origin, being derived from the sacred uas staff. Hermes or Mercury also carried a staff around which 2 serpents were coiled and surmounted by wings, the so-called caduceus. Hermes was worshipped by the early Greeks as a god of healing, the averter of disease, and as a phallic deity. But the chief functions of Hermes were as messenger of the gods, and as the god of merchants, commercial travelers, and thieves. Hence it would seem hardly appropriate that the medical corps of the United States army, and many medical publishers, have adopted the caduceus of Hermes as the official symbol of medicine rather than the single-serpent staff of Asklepios. The caduceus was originally the emblem of the sun god, Horus, which, mythology says, Hermes received from Apollo in exchange for the lyre. In Assyria it appeared first at about 3500 B. C. on a libation vase; and in predynastic Egypt, in a slightly different form, on monuments. It was used as a medical emblem first in the sixteenth century by a publisher of medical books as a title-page device.

The sacrificial offering made most frequently to the great god Asklepios was the cock. In Plato's description of the death of Socrates we recall his dying words: "Crito, we owe a cock to Asklepios". The meaning of this solemnly smiling farewell would seem to be that to Asklepios, a god who always prescribes potions and whose power is manifest in their effects, was due that most welcome and sovereign remedy which cured all the pains and ended all the woes of Socrates, the cup of hemlock. For this great boon of awakening into real life Socrates owed Asklepios a thank offering. This offering of a cock was plainly intended for him as the awakener of the dead to life everlasting.

## FACTORS IN THE EARLY DIAGNOSIS AND TREATMENT OF FRACTURED SKULLS\*

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In presenting this paper on skull fracture, it is not the aim or intention of the writer to bring forth or advocate any new or original measure or information dealing therewith, nor has any attempt been made to discuss the causes of types of skull fractures. It is more to call to your attention and impress upon your minds the application of some of the sound principles of surgery that are beneficial in conditions associated with the symptoms resulting from severe trauma to the head as is so often the case in skull fractures or cranio-cerebral injuries. As a result of the tremendous growth of automobile traffic, and the accidents occurring therefrom, it has become increasingly necessary for the general surgeon to know more about fractures of the skull. About 1/5 of the accident cases actually admitted to the hospital, and many of the cases admitted to the accident wards, must be considered and examined for a possible cranio-cerebral injury. More knowledge and utmost care must be had in the diagnosis of these cases, because most of them become medicolegal cases months later, and the course one pursues in their treatment is always open to criticism.

Just what is the duty of the general surgeon? In the past 10 years, the tendency in treatment of cranial trauma has been toward conservative measures rather than immediate surgical intervention. The high operative mortality that resulted from rushing all serious head injuries to the hospital and performing subtemporal decompression has produced a reaction in favor of a more careful consideration of the need for surgery in those cases. The pendulum has swung in the opposite direction and the general trend of feeling is—do not open the skull, except as a last resort—while formerly it was the first procedure; but on

the whole, results in mortality have not been so promising by the operative method. In the hands of some, a very low mortality, and in others, the rate of death high. What has spelled this difference? Has it been the operator alone, or is it the class of cases? On the other hand, in a number of cases in which the operation was not performed there was a fatal termination within the first 24 or 48 hours. Such cases naturally give rise to the question whether or not surgical intervention might have changed the course of events.

Hitherto, concussion and continued stupor, with or without localizing signs pointing to the area of the brain injured, was considered by most surgeons as sufficient reason for immediate decompression. As a rule, no attempt was made to estimate the degree or nature of the injury, or to formulate any rule upon which to decide for or against operation. It was considered that in cases of depressed fracture and hemorrhage exploration should be made, if the general physical condition of the patient justified the procedure. Numerous classifications of brain injuries have been given in medical literature but most of them are only of value from a theoretic standpoint. To the man doing traumatic surgery there are only 2 types of brain injury, those that should be operated on and those that should not, or: (1) Those patients who die no matter what is done, and those recovering spontaneously without treatment. (2) Intermediate group that usually die if untreated or that may be saved by timely and intelligent intervention. Our early efforts should be directed to placing patients in one of these classes, but this cannot always be done. The injury to the cranial bones is the least important feature. The prognosis depends in great measure on the damage that has been inflicted upon the underlying nervous structures.

Cushing, in 1908, was the first to call attention to the fact that the injury to the brain and its membranes, rather than the fracture of the skull, was the thing to be treated in cranial injuries. It now seems obvious enough to us that the primary hemorrhage and compression, and the secondary swelling and edema, of the brain and its membranes consequent upon

\*(Read at the Camden County Medical Society meeting Jan. 6, 1931.)



such injuries cannot be successfully accommodated in the closed box which we call the skull. In addition to this purely mechanical condition which must be corrected, Weed also has shown that the fluid balance in the cerebrospinal system is destroyed by the presence of blood, which renders absorption impossible. Our task, then, is three-fold: to restore the cerebrospinal balance; to make room for the reactionary swelling and edema; and to care for the immediate and remote effects of hemorrhage.

Brain injuries that require operation fall into 3 classes, and are: (1) Middle meningeal hemorrhage. (2) Simple or compound fracture with bone pressure or bone fragments in the brain. (3) Cases in which there is a rapid increase in intracranial pressure.

Injury accompanied by middle meningeal hemorrhage should be operated upon immediately after shock reaction. A subdural or extradural hemorrhage usually offers no difficulty in diagnosis or localization; due to early paralysis and pupillary reaction. There is a monoplegia or paraplegia on the side opposite the hemorrhage, and in some cases there is dilation and fixation of the pupil on the side of the hemorrhage. Retinal examination is of little diagnostic value at this stage. A subtemporal decompression over the area of the middle branch of the middle meningeal is the best method of approaching the site of hemorrhage. Enlargement of the opening can be easily accomplished to the right or left as is necessary.

Simple or compound fractures with bone pressure or bone fragments should be operated on immediately. Bone pressure should be entirely removed and a careful search made for fragments penetrating the brain. Frequently, fragments are overlooked and will later cause trouble. From the point of view of intracranial tension, head injuries may be divided into 2 classes. Immediate operation is required in patients exhibiting symptoms, to determine, with fair exactness, the area of the brain involved. By "immediate operation" is meant any time after the injury that the patient has rallied sufficiently to make operation justifiable. Intracranial tension alone, without localizing signs, does not require im-

mediate operative opening of the skull, for we have to contend with pressure caused in large part by the edema, and we fear overwhelming medullary pressure and collapse of the vasomotor, circulatory and respiratory centers. Unconsciousness, of itself, has no fatal tendencies; neither have paralysis, Hutchinson's pupil, or an exaggerated reflex. The indications for treatment should be kept clearly before you. If you assume that pressure is not due to massive hemorrhage, to which reference already has been made, the pressure of a traumatized brain can be relieved best by 50% glucose solution given intravenously and by repeated lumbar punctures. Glucose is a hypertonic solution that withdraws fluid from the tissues into the circulation, where often it is needed to conserve the blood volume. Usually 50 c.c. twice a day will suffice, but do not hesitate to double the dose during the first 24 hours if the medullary picture is threatening; watch your tracing of pulse rate and pulse pressure, and when these lines cross as the former decreases and the latter increases, the situation is critical. As a subsidiary measure for the relief of pressure, withdraw cerebrospinal fluid from the lumbar spine, if need be twice in the 24 hours, but not without certain precautionary measures. Do not ruthlessly drain off every drop of fluid, but with the aid of your manometer stop before the pressure reaches normal. This condition may be handled as effectively by other means, namely, lumbar puncture, hypertonic solution by rectum or veins, and ventricular tap. Subtemporal decompression for the relief of pressure is reserved as a last resort and is rarely performed in the first 8 hours after injury; only when a spinal reading of 30 or above is reached will reduction in the amount of cerebrospinal fluid lower the intracranial pressure.

Some surgeons prefer merely decompression and opening of the dura to reestablish cerebrospinal fluid balance, while others advocate drainage by rubber tissue for the period of 48 hours or more. For patients with middle meningeal syndrome or extradural hemorrhage, decompression would seem to be the only measure offering any prospect of cure.

The nonoperative cases or brain injuries

that should not be operated on, fall into 2 classes: (1) Extensive injury with lacerations and separations. (2) Injury in which there is no primary increase in intracranial pressure, but where pressure usually develops later; due to fluid accumulation and edema. Included in this class are the simple, nondepressing fractures and so-called cases of concussion.

Injuries in which there are extensive lacerations and cellular separations reach a rapid stage of exhaustion and medullary paralysis. These massive types of brain injury are fatal and no treatment is of benefit; patients pass rapidly into coma and soon die.

The following items are always worthy of consideration:

(1) Visit and examine the patient at the earliest possible moment and carefully note findings.

(2) The element of shock must be considered and combatted before operative procedure of any kind is instituted.

(3) Careful examination, both physical and neurologic, should be made and repeated from time to time. Roentgenograms of the skull should be taken in every case of suspected fracture. In many instances, especially in cases of basal fracture, the line will not be shown. On the other hand, when a linear fracture of the vault or base is shown, this fact should not be taken as a deciding factor for operation. Whenever possible, fracture of the skull should be demonstrated, just as fractures of the long bones are demonstrated, but pulse, temperature, respiration and blood pressure records should be made frequently. A good custom has been to have the pulse rate taken every half hour and the blood pressure at intervals of from  $\frac{1}{2}$  to 2 hr., in severe cases. From a neurologic standpoint: examine the pupils to see if they are equal or unequal, react to light and accommodation; note whether the ocular muscles are normal; is there nystagmus or inequality of the facial muscles; deviation of the tongue; ability to whistle or purse the lips; bleeding from the external auditory canal or postnasal space; grip of both hands; reflexes of the arms; epigastric reflexes; cremasteric reflexes in men; patellar and plantar reflexes; and Babinski? It is only by watching closely the varia-

tion in these phenomena that one can judge the opportune time for operation.

(4) Ophthalmoscopic examination is required and often may be advantageously repeated. It is not believed that the eye-ground picture in itself is a reliable early guide to the degree of change in intracranial pressure; this is especially true in the first few hours after injury. There have been cases terminating fatally, in which the eye-grounds have shown little more than overfilling of the vessels and hyperemia of the retina. Even with the patient dying shortly after the injury, the disk margins have remained essentially clear-cut, and the optic cup has been well seen. After 48 hours, when the brain has had time to adjust itself to the conditions of increased pressure, the eye-ground picture becomes more significant.

(5) The mental state of the patient is regarded as a fair index of his condition. This applies principally to those cases in which the patient is suffering from edema of the brain. On occasion, decompression has been resorted to when the patient was exceedingly irritable and disoriented, provided lumbar punctures and dehydration had failed to give relief. Unless something can be done fairly early to re-establish normal processes for these patients, it has been found that they not infrequently develop post-traumatic neuroses. The recent work of Dr. Frazier, of draining off all the cerebrospinal fluid and injecting oxygen in its place, followed by x-ray examination, has brought to light many hitherto unknown brain lesions resulting from what were considered slight head injuries, and has explained many of the so-called cases of neurasthenia. Careful examination should be made by the otorhinologist for bleeding from the external auditory canal, bleeding into the pharynx by way of the eustachian tube, and perforation of the tympanic membrane or hemorrhage within the middle ear. Nasal or postnasal bleeding suggests fracture at the base of the skull.

(6) Examination of the spinal fluid, while not routine, is made in all cases where there is a possibility of more than simple concussion. We believe that the spinal fluid pressure readings are of more value than the ophthalmos-



scopic finding during the first few hours. Dr. Frazier, of the University of Pennsylvania, has suggested a rule: whenever the pulse pressure exceeds the pulse rate per minute, lumbar puncture should be performed. Pressure readings should be taken at each puncture. Many cases in which bloody spinal fluid is revealed, especially when it is under increased pressure, present signs and symptoms of a meningitis which disappears after the blood has been absorbed or drawn off by repeated punctures. While we have had no untoward results from lumbar puncture, we always watch the pulse and general condition of the patient while the fluid is being removed, and invariably stop if the pulse shows any variation either up or down.

(7) Subtemporal decompression, when performed for relief of pressure, is usually drained, for we cannot conceive of getting sufficient mechanical relief from decompression alone to accommodate an edematous brain. The drainage which usually follows during the first 48 hr. is of great volume, as judged by the amount of fluid absorbed by the dressing. We believe it is the drainage which is largely responsible for relief. Dr. Frazier states that there can be secreted as much as 1000 to 1500 c.c. of cerebrospinal fluid in 24 hr., and the relief from decompression alone would not be sufficient in many cases.

(8) It is considered proper to operate in all cases of suspected local hemorrhage, for we believe that mechanical removal of the clot is safer than absorption. Dr. Charles Bagley, Jr., of the Johns Hopkins University, Baltimore, after experimental work performed on 18 adult dogs and 26 puppies from 5 different litters, and also after studying a number of children and adults, has summarized his report as follows: Autogenous blood or blood from an animal mixed with the cerebrospinal fluid in young and adult dogs produces neurologic disturbances varying from slight difference in behavior to severe convulsive seizures. Though some of the animals were severely affected by small quantities of blood mixed with cerebrospinal fluid, others have survived more than a year and are apparently normal.

Following the introduction of blood into the cerebrospinal fluid, there begins a reaction of

the parts of the meninges which have come in contact with the blood. The meningeal reaction tends to subside and may disappear as the blood disappears from the fluid. After several weeks, the cellular elements are less numerous in the meninges, but a large amount of fibrous tissue is present. Later in the course of the meningeal reaction, changes in the structure of the cortex are also observed. Moderate dilatation of the ventricle not infrequently occurs following the introduction of blood into the cerebrospinal fluid of the young. The condition may occur in adults, but with less frequency. For example, in 1 case in which a subdural hemorrhage was allowed to absorb, the patient returned 6 months later with Jacksonian epilepsy. At subsequent operation, *the cortex was yellowish in color*, and many adhesions were present at the site of the old hemorrhage.

(9) It is now the practice of most men to open the dura in the majority of cases in which an extradural clot is encountered. In a case that it was my privilege to watch, there was found an extradural, a subdural and a subcortical clot in the same general location. After successful removal of the extradural clot, it was most discouraging to find that later the patient's condition was unimproved; it was, in fact, even worse, and upon reopening the wound and laying back the dura, we discovered a subdural clot which had not been disclosed at the first procedure. Opening of the dura may add slightly to the risk of infection, but a wide opening is not necessary in order to investigate the subdural space, and it may be easily closed.

(10) Local anesthesia is frequently employed. If the patient is in deep stupor or coma, the operation may be performed without difficulty. In cases presenting irritability and restlessness, a combined local and general anesthesia is employed, a minimum of ether being used. Large, depressed fractures have been elevated under local anesthesia when the patient was conscious throughout the procedure. There is little pain, except when tension is brought to bear by leverage on the fragments.

(11) Hypertonic saline (15 to 25%) has been employed intravenously in a number of

cases to reduce intracranial pressure. Most men have not been favorably impressed with the results and have come to rely chiefly on dehydration by the administration of magnesium sulphate, either by mouth or rectum, as advised by Dr. Frazier. From 1 to 1½ oz. (28.35 to 42.52 gm.) of magnesium sulphate are given twice a day when it is possible, or 1 to 3 oz. (28.35 to 85.05 gm.) of crystals dissolved in 6 oz. (170.1 gm.) of water are given as retention enemas every 3 or 4 hr., according to degree of increased intracranial pressure. The intravenous use of glucose is considered by many to be even better than magnesium sulphate, to dehydrate the brain, its action more lasting; 20 c.c. of 5% solution being used. This recalls the teaching of surgeons of years past, who prescribed for all skull fractures a daily dose of castor oil. It appears that more prompt relief is obtained from repeated lumbar puncture than from other methods.

A good routine treatment of cranial injuries is as follows:

On admission, the pulse, respiration, temperature and blood pressure are obtained. If the blood pressure registers below 60 mm. Hg. in systole, or if the temperature is markedly subnormal, a state of shock exists. The head is lowered, external heat applied and 0.5 c.c. pituitrin given by hypodermic. If external lacerations are noted, they are cleansed and explored by incision, often in the accident ward. Here, many times, a fracture is shown to exist and several hours of preliminary examination is saved. The wound is packed if there is bleeding, flooded with some antiseptic, and then covered with sterile gauze. A solution of 2 to 4 oz. of magnesium sulphate crystals dissolved in 6 oz. of water is allowed to flow into the rectum. The head-down position aids in retention of this solution. Lumbar puncture is performed, with careful manometer readings of the pressure.

Dr. Dandy advises against lumbar puncture, feeling that it so lowers intracranial pressure that if extradural or subdural hemorrhage exists the lumbar puncture, relieving the pressure, allows the hemorrhage to increase. This is especially true of hemorrhage in the posterior cranial fossa. This same applies to

solutions to dehydrate the brain, and the fact that blood may be found in the spinal fluid is not of great consequence, according to Dr. Dandy. He advises the following procedure: (1) Leaving the patient strictly alone, until you know that nature is unable to cope with the situation. (2) Study and observe the patient more carefully. The exact state of intracranial pressure can be determined by: (1) State of consciousness. (2) Pulse, respirations, temperature, restlessness, involuntary micturition or defecation. He feels that a certain percentage, perhaps 20%, will be lost, with the utmost available efforts, because the injuries are so severe. About 70% will recover if left alone, and 10% of patients that would be lost if left alone can be saved by well timed and well directed operative treatment.

We are now in a position to determine what the next step will be. If the neurologic signs point definitely to one hemisphere, that region is exposed. This applies only to signs pointing to cortical involvement. Paralysis or definite weakness of one or both extremities on the same side, convulsions, Jacksonian in type, motor or sensory aphasia, are the kind of localizing symptoms required to indicate necessity for operation. If the neurologic signs are vague or indefinite, decompression is not done, unless there is a rapid increase of intracranial pressure and spinal manometer reading of 30 or beyond.

Most patients with cranial trauma are given the rectal injections of magnesium sulphate. As a rule, they are insufficient to prevent manifestations of a rise in intracranial pressure from appearing. If, however, the pulse and respiration rate continue to be depressed or become retarded, and the pulse pressure continues to rise until it equals the pulse rate, then other steps are necessary to reduce the rising tension within the cranium.

Thus, these cases should be subject to very active and careful study from the earliest possible moment. Each case is individual; no 2 seen alike. Only general rules can be used to govern these and only by the combined or collective opinions of a team of trained co-workers can the greatest number be brought to a successful conclusion. If each patient,



as soon as possible following the injury, could be examined carefully and repeatedly by a corps of trained specialists (surgeon, neurologist, ophthalmologist, otorhinologist, roentgenologist and laboratory pathologist) the percentage of correct diagnoses would be much greater, the course of procedure would be more definite and certain, and the percentage of recoveries would be much greater.

#### SUMMARY

(1) Intracranial injuries constitute a class of accidents whose frequency is increasing in civil life and whose mortality will probably always be in the neighborhood of 50%.

(2) Attention should be directed to the damage of cranial contents rather than to damage of the bony parts, and it should be remembered that while the immediate recovery of the patient is a serious consideration, the remote consequences of the injury are equally important.

(3) Intracranial hemorrhage should be drained either by repeated lumbar punctures or, if that fails, intraventricular puncture, or by operative means.

(4) The subtemporal decompression devised by Cushing is a valuable measure in these conditions; it should never be done during the period of shock, and it is wise to supplement it by lumbar puncture or by the use of dehydrating agents. In mild cases, lumbar puncture alone may be adequate, but expectant treatment is seldom justified.

(5) A fracture with rapid increase of intracranial pressure demands either dehydration or operation, next in importance to those accompanied by hemorrhage. Cerebral edema is best treated by dehydration, with epsom salt and glucose, repeated lumbar punctures and subtemporal or suboccipital decompression as the occasion may demand.

(6) Skull fractures are not in themselves fatal. It is the accompanying complications that render these conditions so disastrous.

(7) Head injuries, if severe, have a more favorable prognosis if a linear fracture of the vault is present to assist in preventing formation of cerebral edema. We should have more thorough and repeated examinations by a corps of trained specialists. We should not

hurry patients to operation; except those with active bleeding such as from meningeal involvement. All skull fractures do not require operation. A simple linear fracture with a moderate increase in intracranial pressure does not necessarily indicate operation.

(8) Hematoma of the scalp overlapping fractures should be evacuated to prevent infection.

(9) The spinal mercurial manometer is a valuable aid to determine the degree of intracranial pressure.

In conclusion, we desire to state that we do not advocate spinal puncture as a cure-all, nor do we want to infer that we prefer the conservative method of tapping the spinal canal instead of the operative method of opening the skull, but it is firmly believed that its more extensive use, in selected cases, will prevent the more serious complication of cerebral edema, which, if unrelieved, either results in death or permanent brain damage, with subsequent residual symptoms, such as headaches, mental dulness, change in disposition and character, and a train of symptoms ascribed to neurosis.

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### OCCUPATIONAL DERMATITIS\*

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Injuries of the skin undoubtedly taxed the skill of the primitive medical man but the first authentic descriptions of industrial skin diseases were recorded by Italian physicians early in the sixteenth century. The chimney sweep's cancer, grocer's itch, washerwomen's dermatitis, and the dermatoses peculiar to metal and salt workers, were described. The scope of occupational diseases has steadily grown with the development of industries and new chemical processes, to gain recognition by dermatologic clinics and organizations interested in industrial hygiene.

Careful and methodic observations of industrial dermatoses were worked out by the

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\* (Read before the Industrial Disease Institute, at the Academy of Medicine Building, Newark, March 3, 1931.)

Germans. Ulmann, Oppenheim, and Rille have made noteworthy contributions in the classification and description of these affections. In this country, White of Boston, made extensive pioneer investigations of ivy poisoning, of the venenata group. The German, French, English and American investigators have written much on all phases of occupational affections of the skin. Our state has been ably represented by Dr. Wallhauser, who was appointed by the Governor to the commission which defined the occupational diseases made compensable in New Jersey.

Varying estimates of their incidence have been made by clinicians and public health workers; the consensus of opinion grants that a high percentage of cases requiring industrial compensation is limited to trauma and inflammation of the skin. Conservative estimates, not including domestic workers, attribute more than 5% of admissions to the dermatologic clinics to occupational origin. New industries have a high incidence and suitable preventive measures become necessary. The manufacturers of lubricating compounds, linseed oils, insect powders, and anilin compounds had as high as 30% of employees involved before preventive measures were developed. Trade specialization creates many problems, and the sensitized worker finds difficulty in adapting himself to another trade. Improved working conditions, suitable clothing, and personal hygiene have been valuable preventive measures. Workmen's compensation legislation and industrial insurance firms have encouraged first aid measures to increase the efficiency of workers. The industrial surgeon treats most occupational skin affections, and only those presenting special problems of diagnosis, prognosis, and therapy are referred to the dermatologist, which places the latter in the rôle of medical expert and referee.

Terminology for these conditions has undergone evolution from the early descriptions such as baker's itch and trade eczema. Occupational affections with the qualifying terms determining industrial origin, allergic condition, duration and distribution have found some usage in the descriptions of the inflammatory types. The Germans described 3 classes: the toxicodermias, circumscribed

occupational dermatitis, and occupational eczema. The toxicodermias are erythematous, edematous, or exudative inflammations of sudden onset and considerable intensity, following minor irritations, with a tendency to progress even after removal of the cause. There is idiosyncrasy to a particular irritant and its occurrence is comparatively infrequent. The second group, circumscribed occupational dermatitis, usually develops in a skin that gives a normal reaction after prolonged or intensive exposure to a pronounced irritant, although it may be due to temporary hypersensitiveness or increase in strength and activity of the irritant. Occupational eczema is similar in onset to the second group and develops in a sensitized skin, spreads peripherally, and progresses even after removal of the irritant. This type suggests skin sensitization and is the more common of the 3 groups. After careful study there has been a general recognition that many irritants produce similar skin reactions, and that a single irritant may produce a multiformity of lesions. There are many clinicians in this country who advocate the term *dermatitis industrialis*, qualified to determine the type of lesion and particular occupation, in order to give better classification of industrial affections of the skin.

Knowledge of physiology and biochemistry is essential to the interpretation of skin diseases. The skin is the largest organ of the body, usually calls attention to irritation by itching, is highly resistant to chemical and physical agents, affords excellent insulation, and plays an important part in heat regulation. The skin is our chief protection against many diseases and is an important source of antibodies to combat infections which have gained entrance to the body. It is sensitive to disturbances of metabolism and alteration of normal body function, and investigation of skin sensitization and allergy threatens to give us a new specialty in medical practice.

Inflammatory reactions occur when the threshold of tolerance is overcome by the intensity or prolonged application of irritants. Normal tolerance and adaptability protect the majority from industrial affections. Lowered threshold tolerance implies hypersensitivity and may be either local, inherent, or overcome



by adaptation. Disturbances of circulation, visceral, nervous, and trophic changes, alter the local reactions. Jaddasohn recognizes a general susceptibility which renders the skin sensitive to all forms of irritation, and a special susceptibility which confines the sensitivity to a single irritant. Predisposing physiologic factors in local tissue reactions are more noticeable in youthful, senile, blond, and female skin. Pathologic factors in sensitivity are: excessively dry or abnormally moist skin; previous injury; debility from disease; and repeated exposure to irritants. Dyes, soaps, acids, alkalies, and most inorganic compounds bring about inflammation and swelling by first removing or diluting the natural oils in the upper layer of the skin, then attacking the lining cells of the follicles and pores. General predisposing factors are food allergies, anaphylaxis, local infection, constitutional disorders, and unhygienic environment. Ichthyosis, hyperidrosis, seborrhea, and various cutaneous inflammations are predisposing conditions.

The exciting causes are physical, chemical, occupational, and infectious agents. Under physical causes are: mechanical traction, pressure, friction, and thermal action which include the effects of heat and cold; also actinic and photo-electric changes produced by radium, Roentgen, violet, and sun rays. The chemical causes are: acids, alkalies, oil and coal tar products; also many plant and wood extracts. Many organic, and most inorganic, compounds produce some irritating effect upon susceptible individuals. Occupational exciting causes have been carefully investigated among those employed as mulespinners in the knitting industry, and workers in shale oils, pitch, paraffin, tar, asphalt, arsenic, anilin oils and dyes, because of latent keratoses and cancers.

The infectious agents are: parasitic, mycotic, and bacterial organisms. The more common parasites are those of pediculosis, scabies, and grain itch. The bacterial and protozoan organisms are usually secondary invaders, where some mechanical or chemical agent has broken down the normal integument. Furunculosis is common among workers in oils, greases, paraffin, and especially cutting

oils which become mixed with abrasive and infectious material. Erysipeloid is common in those engaged as commercial fishermen; also those who handle meat and cheese products. Anthrax is encountered in those who handle imported hides, furs, and bristles. Blastomycosis and actinomycosis are confined mostly to farmers. Mycotic finger-nail infections and dermatitis are recognized diseases in fruit pickers and canners. Syphilis constitutes a menace to dentists, physicians, and railway employees.

*Pathology.* The pathologic changes in the skin are not specific, and great variation in effect of the same irritant in different individuals is recognized. The reaction may be slowly cumulative, as recognized in x-ray irritation, and tar keratoses and cancers. Irritants in the form of dust or vapor produce more rapid effects than liquids and solids. Alteration in strength and composition of material often precipitates an attack. The dermatoses are generally localized to the area of exposure, usually the hands, face, and neck. In toxic inflammations, the extensor surfaces of the extremities, face, neck, genitalia, and areas of opposing skin become involved. Occupational affections exhibit the primary and secondary lesions characteristic of nonoccupational diseases, and differentiation is often difficult. The toxic reactions from mercury, phenol, arsenic, turpentine, and satinwood are often scarlatiniform. Etherial and balsamic oils, such as copaiba, produce measles-like lesions. Retiform and pellagra-like eruptions have been noted in those who handle dinitrobenzenes and explosive compounds. Acute, diffuse erythema and purpuric lesions may result from the absorption of quinin, chromium salts, benzene, and have been observed in caisson disease. Most occupations leave their trademarks on the skin.

*Diagnosis.* In attempting a diagnosis, the localization, character of the skin, and associated history must be carefully considered. The eczematoïd and venenata groups give the most difficulty; the predisposing factor must be sought. In cases of dermatitis involving the hands and face, be on the alert constantly for industrial causes. The interpretation requires careful search for local patches of

seborrhea irritated by excessive perspiration and faulty hygiene. If latent seborrheic dermatitis becomes aggravated by chemicals or irritants peculiar to the occupation, compensation should be allowed for the limited period of exacerbation. According to legal interpretation, compensation is not dependent on an implied assumption of perfect health, and does not exclude the weak, physically unfortunate, or those with latent or unknown tendencies to disease. Mycotic conditions of the hands and feet, and syphilitic lesions superimposed on traumatized areas produce perplexing problems of economic importance. A thorough knowledge of differential diagnosis is important; the responsibility placed on the physician necessitates the most careful study of all facts pertaining to the condition, and exhibition of sound common sense in arriving at conclusions. The physician should not attempt a medicolegal analysis, nor should he indulge in hypothetic speculations. Malingering is of special importance, and self-inflicted lesions must be suspected in cases of prolonged duration; most of these have their origin in *bona fide* dermatoses, and healing is prolonged to gain an increase of compensation.

*Prevention and treatment.* A patient suffering from an industrial skin affection, or one suspected of being such, should be carefully investigated and reported. Dermatoses are encountered in all trades. The clinical data must be carefully checked, for many occupational dermatoses are accepted as ordinary skin diseases, since they do not present unusual manifestations. Some are of short duration, others simulate dermatoses of long standing, and many appear as burns, boils, or other common skin lesions. Some immediate name is given to the condition, and the possibility of an occupational affection is overlooked in the rush of the clinic, or a sketchy, incomplete record is made, especially when the patient cannot speak English. There should be more exact analysis of the trade and hygienic environment. It is not enough to know that a man is a printer, tanner, or rubber worker; one must find the irritating agents which he handles and their effects on the skin. Study of the processes of vulcanizing, printing, dyeing, plating, and other trades have been of in-

estimable value in the proper management of preventive measures. Tradesmen in the printing and rubber industries have been carefully investigated, and precautionary measures have greatly reduced the number of cases of chromium, anilin, and hexamethylenamin irritation.

Careful hygiene in cleansing the skin, and care of work clothes have been effective in those handling stains, dyes, and oil products. Allergic tests select those who have been sensitized to a particular drug, chemical, or food product; oftentimes the individual is sensitized to a group of protein compounds. In a recent series of cases of occupational dermatitis, allergic tests in 18 gave the etiologic material, and the 3 others showed exacerbation of symptoms on application of the specific irritant. All cleared up when the specific substance was avoided. Preventive measures should be directed by experts familiar with factory technic, working conditions, material, and medical administration. Routine medical inspection should detect those subject to excessive perspiration, seborrhea and active cutaneous diseases, and direct them to suitable work with advice to use bland protective measures, and to avoid the use of turpentine, gasoline, and alkaline soaps as cleansing agents.

The first treatment is important and assumes correct diagnosis of the lesions. The strong ointments and antiseptics often used as first aid measures are important factors in intensification, extension, and prolongation of the affection. For acute and nonmalignant processes, fomentations are in order, followed later by bland dusting powders or boric acid ointment. Erythema and fissuring may be treated with calamine in limewater and olive oil. Cleanliness and bed rest are important, and in handling the sequels look for factitial irritation. Should shagreen skin or lichenification be noted, x-ray treatment will be valuable. An old employee recovering from a dermatitis should be placed at other work sufficiently long to permit the disappearance of heightened susceptibility to irritation. The last vestiges of active dermatitis should be cured before discharge.



A few suggestions for those encountering irritants are:

- (1) Emollients before and after work.
- (2) Complete removal of the irritant encountered at work by harmless methods several times per shift.
- (3) Inspection of hands and arms by experienced observer to enforce: (a) Early treatment of cuts and burns. (b) Scrupulous cleanliness of the finger-nails, hands, arms, and overalls. (c) Removal from irritants, and prompt treatment of early lesions.

#### SUMMARY

More accurate classification and recognition of occupational affections of the skin is desirable.

Industrial clinics will do much for the identification, suitable management, and prevention of these affections.

The subject of industrial diseases is being given increased attention, and the dermatologist, because of his training, takes an important part in the development of this field of medicine.

### PREVENTION OF MEASLES IN PRIVATE PRACTICE\*

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It has been proved that measles may be either prevented or modified by the use of serum or whole-blood from a convalescent person, and to a less certain extent by the injection of serum or whole-blood from a person who has at any time had the disease. The specific prophylaxis is yet unproved. Most reports concerning measles prevention have issued from institutions in which facilities existed for study that do not exist in private practice. It is for this reason that I wish to demonstrate that the prophylaxis (that is, the prevention or modification) of the disease may be expeditiously carried out on the outside, with no especial difficulty in the use of

equipment, with no great expense to the physician or to the patient, and with a minimal amount of danger.

It may be argued by some that the disease is of no consequence, and may be disregarded; that the disease is bound to be contracted at some time during life, and may as well be contracted during the pre-school years as at any time. To this argument I can oppose a few telling statistics:

(1) Measles in this country is responsible for a little less than 1% of all mortality.

(2) Of measles mortality 90% occurs under the age of 10 (that is to be expected, because the greater number of cases occur during those years), but 70% of all measles deaths occur under the age of 3, although measles morbidity is higher above the age of 3 than under that age.

(3) There is a mortality under the age of 2, affecting in many epidemics over 10% of cases.

I doubt that it is generally appreciated that measles in children under 5 years accounts for more than 5 times as many deaths as scarlet fever; almost  $\frac{3}{4}$  as many as diphtheria; and  $\frac{2}{3}$  as many as pertussis; the 2 latter diseases being notoriously severe in the very young.

It is also accepted, though I have no figures to support the premise, that measles is dangerous in children with tuberculosis (active or incipient) and in those children who have frequent attacks of bronchitis.

The method of prevention that I have employed uniformly in these cases, is simply the injection of blood from an adult, who has had measles, into the muscle of the exposed child. In the majority of cases I have used the parent, and have therefore contented myself with assurance regarding recent acute infection and syphilis; I have not taken routine Wassermann tests. Compatibility of blood is not essential. I have noted no immediate febrile response to the injection.

The necessary equipment can be carried in a small bag: A 20 c.c. Luer syringe and a 20 gauge venapuncture needle, sterile in a sterile towel; 1 bottle of iodine; 1 bottle of alcohol; a single swab; package of sterile gauze squares; tourniquet; and adhesive.

The donor sits or lies adjacent to a chair

\*(Read before the Bergen County Medical Society, Dec. 9, 1930.)

where another individual holds the child prone on her lap, right hand on the nape of the child's neck, and left arm about the bend of the child's knees. The donor's cubital space and the child's buttock are swabbed with iodine. Then, about 25 c.c. of blood are withdrawn and quickly injected deeply into the child's buttock. The needle is then with-

drawn and the buttock massaged. The whole operation consumes less than 1 minute. There is no necessity for a change of needles, nor for citration of the blood. The operation is not essentially painful; older children who have in no way been restrained have winced, but have not cried, and described the injection as hurting comparatively little. The injection

produces a turgor of the overlying skin in small children, but they sit down and run about with no apparent discomfort in less than 5 minutes.

In 2 cases I have seen a swelling with all the signs of acute inflammation, together with elevation of temperature, occurring on the tenth day, but in each case the swelling and

TABLE No. 1

No.	Name	Age	Exposure	Temperature	Rash	Illness	Complication	Remarks
1.	D.B.	3	House	±	++	0	0	0
2.	R.Z.	10 mo.	House	0	0	0	0	0
3.	A.S.	4	House	0?	+	±	0	0
4.	M.O.	1	House	0	0	0	0	0 (2)
5.	B.S.	2	House	0	0	0	0	0
6.	J.V.	1	House	0	0	0	0	0
7.	C.P.	1	House	0	0	0	0	0
8.	R.H.	2	House	0	+	0	0	0
9.	J.F.	1	House	0	0	0	0	0 (2)
10.	D.E.	1	House	102	+++	+	0	0 others quite ill
11.	J.F.	2	House	0	0	0	0	0
12.	H.E.	1	House	0	±	0	0	0 contact contracted measles

Number of cases, 12; prevented, 7 (58%); modified, 5 (42%).

TABLE No. 2

No.	Name	Age	Exposure	Temp.	Rash	Illness	Complication	Remarks
1.	A.W.	5	Play	0	0	0	0	0
2.	M.W.	5	House	103 ½	++++	+++	0	0
3.	M.B.	7?	House	0	0	0	0	Unprotected sibling also well
4.	E.L.	6	Play	0	0	0	0	0
5.	M.R.	4 ½	House	102	++	++	0	0
6.	A.R.	6	House	102	++	++	0	0
7.	M.R.	10	House	103 ½	++++	+++	0	0
8.	F.R.	6	House	104	++++	+++	0	Local reaction.
9.	S.R.	11	House	0	0	0	0	Measles from 2nd exposure

TABLE No. 3

No.	Name	Age	Exposure	Temp.	Rash	Illness	Complication	Remarks
1.	J.P.	10 mo.	? maid	0	0	0	0	0
			++					
2.	M.G.	19 mo.	Visited	0	0	0	0	0
			+					
			Visited	0	0	0	0	0
3.	N.W.	1 ½	++					
			Visited	0	0	0	0	Local reaction
4.	D.S.	3	±					
			(Kissed)					
5.	D.H.	3	Visited	0	0	0	0	0
			+					
6.	C.D.	7 mo.	Visited	0	0	0	0	0

drawn and the buttock massaged. The whole operation consumes less than 1 minute. There is no necessity for a change of needles, nor for citration of the blood. The operation is not essentially painful; older children who have in no way been restrained have winced, but have not cried, and described the injection as hurting comparatively little. The injection

all symptoms subsided completely in 24 hours. I have chosen to accept this phenomenon as an unusual serum reaction rather than the result of the introduction of microorganisms.

Before presenting the tabulation of results, it is only fair to explain that the epidemic, during the course of which this study was made, was of secondary magnitude, having



about 2/5 the incidence of that in 1926, and the severity of the cases was minimal. There was no death reported in Englewood or Tena-fly, and I and others to whom I have spoken observed very few complications, none serious.

The total number of children injected was 27 and I have arbitrarily tabulated them in 3 divisions: (1) Very young children with maximum exposure. (2) Older children. (3) Very young children, exposure doubtful.

I have attempted to make these tables sufficiently complete to preclude the necessity for detailed explanation of their content. I have not noted the day of exposure because in every case the rash had appeared in the individual to whom they were exposed and in no case did I inject after the fifth day of exposure (accepting the invasion period arbitrarily as 3 days.)

On the whole, I am better satisfied with a case of modified measles than with absolute prevention. I do, however, feel that postponement of the disease to a later time, when the infant's frailty has been superseded by the robustness of the older child, is a worthwhile accomplishment.

I do not feel that the results described in table number 2 have any positive meaning regarding the value of the procedure in older children, but I feel that table number 1, even with its relatively small number of cases, shows a very great preventive value of the injection. Table number 3 has very little scientific worth because of the problematic exchange of virus, but the failure to contract the disease after known exposure sufficient to prompt several of the parents to request inoculation, is rather unusual unless one accepts the fact that the blood helped them to escape infection.

In passing, it should be pointed out that the parents in every instance were glad to cooperate with us, after the rationale of the procedure had been explained, and several anticipated the suggestion by themselves requesting the inoculation.

#### CONCLUSION

(1) Measles prophylaxis is a sufficiently simple and safe procedure to be carried out in the home.

(2) The use of whole-blood from an adult who has at any time had the disease is effective in very young children, no failure either to modify or to prevent the disease having been noted in this series of cases.

(3) I feel that the use of whole-blood or serum from an adult is indicated in cases of known exposure if the child is under 4 years of age, or, if older, it has any constitutional weakness, such as bronchitis or tuberculosis, provided the procedure can be carried out sufficiently early in the period of incubation.

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### THROMBOSIS AND EMBOLISM\*

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Thrombosis and embolism have become relatively more important in the surgical world as the improvement in technic has diminished many other types of complication. The sudden exodus of a patient 5 to 15 days after operation, often occurring as preparation is being made to leave the hospital, is a surgical calamity of inestimable moment. Strangely enough little has been done to discover the cause and thereby diminish the incidence of thrombosis and embolism. Various clinics have made statistical reports, and we know the incidence is higher in certain abdominal operations than elsewhere.

It is generally accepted that trauma, infection, slowing of the blood stream and increased dehydration of the blood are factors in producing thrombosis; nevertheless, some patients develop thrombosis with a minimum number of the above factors, while others with a maximum number remain unscathed. For this reason we decided to study, at the Fifth Avenue Hospital, the blood clotting factors of all patients admitted to the surgical service. Studies of the prothrombin, fibrinogen and antithrombin content, with the resultant determination of the clotting index, will be given in a later part of this article. We believe,

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\*(Read at the Bergen County Medical Society Meeting March 10, 1931.)

from this study, that we may prognosticate in the case of the patient who is apt to develop thrombosis, and we believe that certain therapeutic agents may be administered that will decrease the incidence.

Physiochemical studies reveal that blood plasma, so long as its constituents are not dissociated by extraneous forces, is a single complex in equilibrium, rather than a mixture of substances. The initial views of Harvey (1633) and of Woodbridge (1886) have come again into their own—"blood plasma is protoplasm and clotting is the last act of living blood".

When blood is shed the plasma dissociates into substances which yield a clot. During the latent period of dissociation antithrombin is precipitated and prothrombin is activated by calcium ions. The resulting thrombin gels soluble fibrinogen into insoluble fibrin.

#### FACTORS PRODUCING CLOTTING IN THE BLOOD STREAM

Having reviewed the accepted mechanism of normal clotting, we must now consider what happens in normal conditions, and why, in diseases and trauma, we find spontaneous clotting in the blood stream. The 3 factors most commonly recognized as producing spontaneous blood clotting are: (1) changes in character of the blood; (2) changes in the rate of blood flow; and (3) changes in the vessel walls.

It has long been recognized that a clot can be started by throwing out to the periphery the blood platelets when the circulation is slowed down. As these blood platelets clump along some portion of the vessel walls there takes place a coagulation, forming a red clot around the nucleus of platelets. The great question which comes up is whether this formation of clot can take place with only a slowing of the circulation or trauma, or whether there must be first a change in the blood-clotting elements of the blood. Some writers feel that mild damage to the liver stimulates fibrinogen formation. Others think it is an interaction of the liver and the adrenals. One of the most interesting pieces of work in this field was done by C. A. Mills and is concerned with the effect of diet on

clotting and basal metabolism. He showed that a carbohydrate and fat diet will raise the basal metabolism but will not increase clotting, while a protein diet not only raises basal metabolism but definitely increases the blood-clotting elements, and attributes this to some unknown factor connected possibly with the amino-acids derived from protein metabolism.

In order not to go too far afield, and to limit the subject so as it may be discussed in the time allowed, this paper will be limited to postoperative thrombosis and thrombophlebitis, and to embolism which occurs therefrom. An embolus, as you know, is a blood-clot or other body carried by the blood-current and obstructing circulation at point of lodgment. Obviously, it would be out of place to discuss tumor, air and foreign body embolism. The problem of fat embolism, which may be a considerable factor in postoperative complications as well as in fractures, is too large and complex a subject to attempt to discuss at this time.

Adami describes the difference between postmortem clotting and thrombosis as follows: *Postmortem clotting*. (1) There is no injury to the vein wall; the clot may be easily picked out; it is moist. (2) There is no organization or lamination of the clotting, i.e., the blood is coagulated *en masse*. It may have 2 layers, a pale outer and a dark inner mass. *Thrombosis*. (1) The thrombus is attached to the vein wall, with microscopic evidence of injury to the intima. (2) It is dry and friable. (3) There is a definite arrangement of the contained cells. There are several types of thrombi: (a) A blood platelet thrombus, white in gross appearance, and showing, on microscopic examination, a great mass of platelets. (b) Hyaline thrombus, due to conglutination of erythrocytes; on microscopic examination numerous shadows of erythrocytes may be seen. (c) Fibrin thrombus is usually small and microscopic examination shows pure fibrin in laminated arrangement. (d) White thrombus is quite common and microscopic examination shows infiltration with leukocytes. (e) Red thrombus, which somewhat grossly resembles a postpartum clot but on microscopic examination shows fibrin and red blood



cells in a laminated arrangement, and it has more white blood cells and platelets than a postmortem clot.

Thrombophlebitis is more commonly associated with direct injury to the vein wall and is primarily an infection of the vein with a secondary thrombosis. On microscopic examination the entire vein may be infiltrated with leukocytes and in extreme cases there may be periphlebitis which may become suppurative.

Clinically, one observes 3 main types of thrombophlebitis: (1) An acute, fulminating phlebitis, associated with chills, high temperature, redness and tenderness along the course of the vein, with swelling of the limb. The thrombus may break down and numerous suppurative emboli be distributed throughout the body. In such cases there is evidence of a bacteriemia and there may be septic foci in almost any organ. (2) Acute thrombophlebitis associated with a moderate elevation of temperature, swelling of the limb, and pain. Fever may persist for 5 to 15 days. As these cases are usually observed early and precautions taken, embolism is not frequent. A clot in the vessel wall may become organized and the lumen entirely occluded. Return circulation of the leg is usually accomplished by either compensatory dilation of the superficial veins or a canalization of the thrombus and subsequent reestablishment of blood supply through the affected vein. The present day furore of obliterating varicose veins makes it imperative to examine every patient coming for injection treatment to rule out the possibility of a previous thrombophlebitis. If the compensatorily dilated superficial veins are occluded the leg will again become swollen and remain so until a second collateral circulation can be established. Let me cite an incident: A boy of 19 was operated on, by another surgeon, for a loose internal semilunar cartilage of the knee. His postoperative course was uneventful, and he left the hospital at the end of 2 weeks. At the end of 6 months he came to me complaining of varicose veins in this extremity. On reviewing his chart I found that he had run a slightly higher postoperative temperature than normal. In one of the nurse's

pain in his leg. The postoperative surgical notes made no statement about swelling or pain. There was evidence, when I saw him, of enlarged anastomotic veins extending from below Poupart's ligament upward on to the abdomen. I advised the patient not to have any operation for the enlarged veins. He was dissatisfied and went to another hospital where his veins were operated upon. I saw him 2 months after his discharge from that hospital, with leg swollen, cold and white, and he was suffering considerable pain. We must assume that this patient had a silent thrombophlebitis following his first operation. The later appearance of varicosities on his legs was a compensatory act of nature to return the blood through the superficial veins, as the deep ones were occluded. At his second operation the compensatory veins were removed and, as a result, he had a cold, swollen, edematous leg.

(3) Silent thrombosis. It is probable that there is very little thrombophlebitis associated with silent thrombosis. It is this type, running a relatively normal postoperative temperature, having a sudden massive embolus occluding large vessels, with resulting death, that is the most distressing to the surgeon, to the family and the public at large. It is with particular reference to this type that we have attempted, at the Fifth Avenue Hospital, to study the blood-clotting factors involved.

It would seem advisable at this time to enter into a philosophic discussion of the causes of postoperative thrombosis and thrombophlebitis. Analytic reports from surgical clinics tend to show that these conditions are more prevalent following operations upon the lower abdomen and in fat people, and rarely do they occur following operations on the brain and skull. One may ask why this should be, for many veins must be traumatized in skull operations. I venture to suggest the following factors concerned in their etiology: (1) Where the surgical approach has been through the abdominal wall there is constant motion in the field of repair during the first 48 hours; in operations on the skull, with the rigid skull cap, the field is kept at rest. With every breath taken, and with the usual postoperative nausea and vomiting, there is a con-

stant thrust and pull on the operative field, which might easily dislodge an embolus or cause an extension of a small thrombus downward into a larger vein. (2) Approach for an abdominal operation is through an area of subcutaneous fat, while in skull operations there is a relatively small amount of fat. With the insertion of sutures, often under too great tension, and with the application of a tight abdominal dressing, necrosis of the traumatized fat may result. Experimentally, we have found in dogs that if fat is taken from the subcutaneous tissues or the omentum and ground up with a small amount of saline in a mortar, the resultant fluid contains approximately 2-4% fat. When this emulsion is injected intravenously a marked rise in the blood-clotting index is produced. (3) Since Welch's classical discussion of thrombosis and embolism, in Allbutt's System of Medicine, almost all pathologists and surgeons have accounted slowing of the blood stream as one of the primary factors in production of thrombosis. It has been shown that thrombosis rarely occurs in arteries because the circulation of the blood is too rapid. Experiments have been performed, inserting formalin-prepared arterial segments in arterial defects, without subsequent thrombus formation. Pathologic specimens of aneurysms have shown that thrombosis occurs in the portion where there are eddies; but where a dissecting aneurysm has allowed a rapid flow of blood, thrombosis has not occurred. Following abdominal operations it has been an almost universal practice to apply tight surgical dressings. The distension which usually follows in 24 hours causes a marked increase in intraabdominal pressure. If we consider that the return flow of blood in the vena cava is largely due to heart suction and respiratory movements, this increased abdominal pressure and splinting of the diaphragm must cause considerable stasis in the veins of the lower extremities. Moreover, with the almost universal use of the Gatch bed in the Fowler position we have the double factors of gravity and constriction in the region of Poupart's ligament, increased by flexion of the thighs and by the lower border of the tight dressings. (4) Infection or the presence of bac-

teria or their by-products in the blood stream is generally advanced as another contributing factor. These complications may occur where, to all apparent gross observation, the operative wound is healed *per primum*. We know that bacteria enter the blood stream through the intestinal walls. With postoperative distension and slowing down of peristalsis, the bacterial flora of the intestinal canal must multiply to a marked degree. Moreover, it would seem probable that, with the thinning out of the intestinal wall due to distension, more bacteria might enter the blood stream. (5) Dehydration, with resultant increased viscosity of the blood, is another factor mentioned in etiology of thrombosis. It is hard to estimate in the first 48 hours postoperative the increase of fluid output over intake. With preoperative purgation, increased sweating due to postoperative elevation of temperature, vomiting and urination, the fluid output is tremendously increased; at the same time the intake of fluids is markedly diminished. If a patient is vomiting, the oral method of intake is almost impossible.

*Blood-clotting factors.* In the beginning of our study we were impressed with the fact that some patients with a minimum number of the known predisposing causes had thrombosis occur, while others with a maximum number escaped. For instance, a woman aged 38 years, after resting her arm on a desk for 4 hours while collecting tickets at a moving picture theater, developed phlebitis of the basilic vein of the arm. As a contrast, we could cite numerous cases of war injury where there was infection, vascular injury and slowing of the blood stream without resultant thrombosis. This striking contrast convinced us there might be something in the blood-clotting factors inherent in an individual that would be an unknown agent in the production of thrombosis. We decided, therefore, to study the clotting factors of each patient admitted to the staff service of the Fifth Avenue Hospital. At the beginning we analyzed the antithrombin index, the prothrombin index, fibrinogen, platelet count and the rate of platelet dissociation. As the platelet count is greatly influenced by chronic infection, we have recently discarded the platelet count and



dissociation rate. As prothrombin and fibrinogen hasten coagulation and antithrombin retards coagulation, a blood-clotting index has been formed of which prothrombin and fibrinogen are the numerators and antithrombin the denominator. The detailed description of the tests has been published in an article by Bancroft, Stanley-Brown and Kugelmass, in the *Annals of Surgery* for August 1929. It would seem inadvisable to take up these details at the present time. As the normal prothrombin is 0.1, fibrinogen 0.5 and antithrombin 0.1, the index then becomes  $0.5 \pm 0.2$ .

Blood examinations have been made postoperatively and, at first, 3 and 5 days later. Lately, the postoperative examinations have been changed to 5 and 9 days. The blood of 965 patients has been examined. Not all of these, however, had preoperative determinations, as some of the patients were referred from the medical clinics and, also, some examinations have been made elsewhere on patients suffering from fully developed phlebitis. We have considered any patient with a blood-clotting index of over 0.9 as having a clotting tendency. In all, we have studied 25 patients who have had clearly demonstrable thrombosis, thrombophlebitis or embolism, and with 2 exceptions these have had high clotting indices. About 20% of all the patients examined have had high clotting indices but have not developed an obvious thrombosis. Nevertheless, almost without exception these patients have run a rather high postoperative temperature. For instance, a hernia patient occasionally would run a temperature ranging from  $99^{\circ}$  to  $100^{\circ}$  for 12 to 14 days without obvious wound infection or evidence of external phlebitis. Hysterectomies or gangrenous gall-bladders tend to have high indices, and we have felt that they probably had a concealed thrombosis or thrombophlebitis and came into the potentially thrombosis class, but we have not considered them, in our analysis, as such.

*Technic of tests.* By venapuncture 9 c.c. of blood is taken and put into 1 c.c. of 1% sodium oxalate. The specimen is centrifuged and the plasma removed. Tests are then made on the plasma for prothrombin, fibrinogen and

antithrombin. About 40 minutes is required to do a complete test if the platelet count is made and platelet disintegration time noted, but four tests can be done in  $1\frac{1}{2}$  hours.

We have been able to prove experimentally on animals and humans that there is only a slight postoperative rise in the blood-clotting factors in uncomplicated surgical procedures; but if a gangrenous process with thrombosis associated therewith is produced, the clotting factors rise.

We have had 3 patients with high clotting factors, either before operation or shortly afterward, who have developed either thrombosis or embolism. Allow me to cite 2 illustrative cases:

*Case 1.* A patient admitted for gall-bladder disease. She had high clotting factors on admission. Because she had not seemed to us to be a satisfactory risk, operation was not considered and the patient left the hospital. She later returned, on the medical side, with symptoms suggesting pellagra and was placed on a high protein diet. A month later she was admitted to the hospital with a bilateral femoral phlebitis.

*Case 2.* A patient was operated upon for cholelithiasis and benign polyps of the stomach. The operation of cholecystectomy and gastrotomy for removal of 2 benign polyps in the pyloric end of the stomach was performed. On her fifth postoperative day, when temperature was practically normal and convalescence apparently satisfactory, she had a high clotting index. On the night of the sixth day she got out of bed, fell and struck her right arm. The following morning there was definite evidence of an embolus in the right brachial artery. An embolectomy was performed and the blood flow apparently re-established, but the patient died from shock, the following evening.

The chemical nature of the clotting components has been established, as lipins for the platelets originating in the bone-marrow, and globulins for the prothrombin and fibrinogen synthesized in liver. Lipins and globulins are the source of the blood-clotting substances, initially arising from the daily dietary. This nutritional basis for the composition of blood in clotting substances led me to a dietary treat-

ment for certain hemorrhagic diseases. In our animal experiments it had been shown that an acid diet with high nucleoprotein content will increase the clotting factors of the blood, while a basic diet omitting as far as possible proteins and fats will diminish the clotting factors. We have also been able to demonstrate this clinically on human patients. We feel that this experimental work on the blood clotting factors is still in a very indefinite state. The tests for prothrombin, anti-thrombin and fibrinogen are complex and are not practicable for routine examinations in a general hospital. It is our hope that we may be able to simplify this procedure for adaptation as a routine test even by a relatively unskilled technician.

#### TREATMENT

If we base our treatment upon our theoretic concepts of the etiology of thrombosis and thrombophlebitis, the following suggestions can be offered for consideration:

(1) In abdominal cases every effort should be made to reduce the postoperative nausea and vomiting in order to keep the field of operation quiet. In peritonitis, and in high upper abdominal cases, the Levin tube inserted through the nostril immediately after the patient has regained consciousness greatly reduces vomiting.

(2) The approach for an abdominal operation is usually through a layer of subcutaneous fat. Experimentally, we have found that emulsified fat increases markedly the blood clotting factors. Care should therefore be taken to avoid traumatizing the fat by overzealous pulling of the retractors. Tension sutures should be loosely tied, because the secondary edema following operative trauma rapidly increases tension. Irrigation of the fat with ether before closure would seem advisable in order to dissolve out the free fat particles.

(3) Pool, in 1913, published an article on "Systematic Exercises in Postoperative Treatment", in which he illustrated the type of exercises to be used, and recommended that treatment be started on the third postoperative day. The motion of the arms and legs

would in no way interfere with healing of the wound, and would tend to improve circulation.

In our opinion, tight abdominal dressings should be eliminated. G. W. and Kingsley Roberts, of the Fifth Avenue Hospital staff, for years have not used any abdominal dressings and have concealed their wounds with court plaster strips. Their incidence of evisceration or infection has not been greater than when tight dressings are used. It is our custom to apply sufficient gauze to cover the incision and to hold it in place with merely enough adhesive plaster to prevent its moving. No attempt is made to apply pressure, and no abdominal binders are used. During the 3 years this procedure has been followed there has been only 1 case of wound evisceration, which was due, I believe, to other causes. The patients are infinitely more comfortable and their upper abdominal distension is certainly less. It has been our custom on the first day postoperative to inspect all dressings, and any that feel the least bit tight are loosened so that the patient is made comfortable. Even with dressings applied loosely at the time of operation one is often surprised to see an expansion of at least an inch after cutting the adhesive the first day postoperative.

We believe that distension is lessened if food is given early. Theoretically, it is logical to assume that if no food is present in the intestinal tract there is no stimulus for peristalsis, and fermentation will take place. If a bolus of food enters the intestine there is stimulus for peristalsis, which will carry with it gas as well as solid material. In uncomplicated cases, after spinal, ethylene or gas anesthesia, the patient is routinely given tea and toast the afternoon following the morning operation.

(4) Fortunately, in most clinics, the giving of active catharsis the night before operation is now omitted from preoperative preparation. Active catharsis, which tends to dehydrate a patient and make the night before operation uncomfortable with cramps, is unnecessary. A mild catharsis given 2 nights before operation, and an enema the evening and morning before are sufficient to allow almost any operative procedure in the abdomen. The routine



administration of fluids, either by intravenous or subcutaneous methods, will aid toward diminishing postoperative dehydration. Some authors have suggested that intravenous administration of glucose might be one cause of increased incidence of thrombosis. Experimentally we have been unable to find any increased clotting factors after glucose administration.

(5) From our studies of the clinical cases and of the blood clotting factors, we have come to believe there are 2 types of thrombosis of the lower extremities: (a) The more or less silent type, with slight elevation of temperature, but associated with swelling of the leg and definite venous obstruction. (b) The septic type, associated with high fever, frequently bacteremia, and infection as the predominant characteristic. Arbitrarily, we have attempted to treat each type as a separate entity; with thrombosis as the predominant factor, treatment has been by sodium thiosulphate.

Although a nonprotein diet is successful in reducing a high clotting index, it cannot be depended upon in postoperative cases, for it is in this group that a quick reaction is often needed to prevent an accident. We therefore began to look for some drug which, given intravenously, would rapidly reduce the index, especially in the group in which the prothrombin was high and the antithrombin low. Sodium citrate was naturally considered, as it is such a well-known agent for keeping blood fluid. Our results were good, but large amounts were required and unless great care was used in buffering the solutions bad reactions were frequent. At the suggestion of Dr. Lieb, we tried sodium thiosulphate. They had used this in large doses on animals when they wanted to prevent clotting in extracorporeal tests on the circulation. We found that it was necessary to give only 10 c.c. of 10% solution, and repeat the dose in 24 hours, to obtain the desired effect. Larger amounts can be given safely but are not needed. We have used it now on 15 cases, 6 of which had some form of phlebitis or thrombosis, and 9 re-

ceived prophylactic doses because the index was found high following operation. In all but 1 of these cases the index dropped; the main effect being to lower the prothrombin and raise the antithrombin. In the case which did not respond, the prothrombin was normal and only the fibrinogen high. The chemical action is not known, but it is probably due to the sulphate combining with the ionizable calcium and preventing its action with the prothrombin. This, however, is purely theoretic. The following case illustrates the way it acts on a postoperative phlebitis: Mary Boylan, suffering from fracture of the femur, developed a pulmonary infarction; following this a phlebitis of her right leg; then a second pulmonary infarction and a recurrence of phlebitis in her leg. With the onset of a third attack of phlebitis, this time in the left leg, we were called in to see her. At that time her index was 1.1; prothrombin 1.38; fibrinogen 1.04, and antithrombin 1. We started her on small doses of sodium thiosulphate. After daily doses for 4 days her temperature, which had been running around 101° and 102°, was down to 99° and 100°, the pain had left the leg, and her index was 0.84; prothrombin 0.93; fibrinogen 0.94; antithrombin 1. As this had been an extreme case we continued the sodium thiosulphate every other day for the next 2 weeks. The index stayed normal and the patient had no further return of symptoms.

In all cases where the solution was used as a prophylactic measure the index dropped. In all these cases where the prothrombin was 1.38 it was brought down to 1. The fibrinogen was not lowered consistently.

In cases with thrombophlebitis the predominant factor, following the report of Shellenberger, in a paper read before the Southern Surgical Association in 1924, we have used the intravenous injection of gentian violet 0.5% solution. The gentian violet crystals are dissolved in sterile, freshly-distilled water, the solution filtered and injected. The maximum dose is 5 mgm. per kilo of body weight. It has been our custom to inject 50

c.c. and repeat the dose alternate days for 2 or 3 doses, and we have been impressed by the satisfactory results obtained. Chills have occurred in 1 or 2 cases, but of small moment. Relief from pain has usually occurred following the first injection and we have noted in 2 cases a decrease in the circumference of the leg of 1 to 2 inches in 3 to 4 days. One patient, who had a severe infection 20 days postoperative, had an evening temperature of 103° for 4 days before the injection. She was given 46 c.c. of 0.5% solution. At that time her thigh measured 24 and her calf 11 in. That night her temperature went to only 100.8° and from there on returned steadily to normal. The second dose of 50 c.c. was given 5 days later. In 4 days after the first injection the thigh had decreased 2¾ in. and the calf 1 in., and they were of normal consistency and color. Two months after the operation there was no evident swelling of the leg. We feel that in the septic type of thrombophlebitis gentian violet is a therapeutic agent of considerable value. During the 3 years we have used the above mentioned prophylactic measures we have not had a sudden death from embolism. Walters, of the Mayo Clinic, has advised the routine postoperative use of thyroid extract to prevent thrombosis and embolism. His results in the series published are very encouraging: We have not had sufficient experience with this method to form any opinion of its value.

#### CONCLUSIONS

(1) The application of surgical principles, such as the avoidance of trauma, the obliteration of dead spaces, and the prevention of postoperative anemia of wounds, should reduce the incidence of infection.

(2) Experimental work on the blood-clotting factors associated with thrombosis and thrombophlebitis suggests that there may be inherent in an individual a predisposing tendency in addition to the generally accepted factors of infection, slowing of the blood stream, trauma and dehydration. This work is in its infancy and is suggested as a possible prophylactic solution of a surgical calamity.

## STATISTICAL STUDY OF DIPHTHERIA IN NEWARK, WITH SPECIAL REFERENCE TO CASES OCCURRING AFTER SCHICK TEST OR TOXIN-ANTI-TOXIN IMMUNIZATION

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Many of my medical friends have asked from time to time why diphtheria cases increased during 1929 and spring of 1930, and why diphtheria occurred following Schick test and toxin-antitoxin immunization. Because these questions have arisen so repeatedly and the interest in the subject seemed so general, I felt that I should endeavor to answer the question to some degree.

If you saw the survey of epidemic diseases published in the American Medical Association Journal, June 1930, you no doubt realize that Newark holds the unenviable position of lowest in the list of cities rating 100,000 or more in population for the year 1929, this rating being based on disease incidence. Like everything else, there's a reason; Newark's figure is a true one and that is more than can be said for many of the other cities listed. For some years back the advertising campaign of the Health Department has stressed the culture idea. As a result, most doctors culture every throat showing any congestion, patch or tonsillar exudate, no matter how slight. It is surprising the number of cases that have been found in this way.

Furthermore, when a case of diphtheria is reported, the Health Department Inspector cultures all other members of the family, all contacts in the quarantined home, and even to neighboring apartments when such procedure seems justifiable from the history of exposures obtained from quarantined family. All contacts in the individual's class at school are also cultured by the school authorities. This results usually in 50 or more cultures for each case and, as a result, many secondary cases have been found. This increase in cultural activity has resulted in a great increase



in our known cases and even though an individual shows no clinical signs but has had 1 positive culture, it is carried as a case on our records, whereas in other communities these are not so classed.

Secondly, the intensive Schick work (by this I mean testing, immunizing and re-testing) that has been done, has increased the danger of infection for those who are not so protected, because it has broken the chain of direct contact that ordinarily would give some protection and at the same time has increased markedly the number of "carrier cases". Each of these carriers, whether temporary or per-

manent, has been placed on our books as a case. The immunization procedure has given the individual sufficient antitoxin to prevent his being ill but not enough to prevent carrying live bacilli.

Thirdly, the entire Atlantic seaboard has passed through an epidemic of no mean proportions with its direct center situated in Newark, New York and Philadelphia.

Fourthly, more adequate and zealous attention upon the part of school physicians and nurses has brought to light another lot of cases that would usually have been passed by. (See Chart No. 1.)

1930 Population 474,000		1915 Population 375,000		CHART 1 DIPHTHERIA									
Total	Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
46		5	7	8	3	6	1	3	1	1	1	6	4
1210	1915	146	138	160	90	83	51	58	51	71	90	112	160
57		7	2	4	6	8	4	6	1	4	3	3	9
923	1916	124	85	76	96	99	71	61	47	29	57	102	76
50		2	5	5	2	7	5	4	1	2	3	7	7
870	1917	79	81	84	70	77	73	44	35	59	103	108	57
82		8	7	7	11	5	4	1	5	11	7	6	10
974	1918	81	112	95	103	63	60	65	49	91	87	77	91
50		5	7	11	7	2	2	2	4	2	0	5	3
1565	1919	154	154	149	161	149	122	96	64	72	121	182	141
62		7	11	5	7	5	1	4	2	1	5	4	10
1022	1920	129	94	95	60	70	72	47	34	44	92	146	139
44		6	5	7	5	3	5	2	2	2	1	3	3
1059	1921	173	128	126	75	102	76	43	24	47	67	78	120
73		13	8	11	7	8	5	1	4	3	2	7	4
771	1922	129	94	73	52	75	36	34	32	43	51	72	80
34		10	3	3	4	2	0	3	0	1	2	4	2
634	1923	89	69	50	40	64	43	24	30	17	57	63	88
39		2	4	6	9	3	1	0	3	0	4	2	5
575	1924	69	64	71	55	50	30	27	33	20	47	42	58
42		6	4	5	4	1	5	2	3	3	3	4	2
509	1925	45	33	53	54	47	39	43	28	27	47	35	58
21		0	1	4	1	4	2	2	1	0	3	1	2
409	1926	45	31	49	24	51	32	23	12	22	32	41	47
62		3	2	7	1	5	0	4	4	4	9	14	9
696	1927	44	47	30	38	34	47	50	30	40	92	121	123
94		7	8	9	10	7	18	6	4	3	1	7	15
1362	1928	107	95	111	94	110	197	83	52	70	113	149	181
92		10	10	9	7	11	5	10	7	5	4	6	8
1717	1929	182	128	184	176	193	132	102	88	78	128	183	143
48		12	8	6	5	6	2	0	3	3	0	0	3
871	1930	116	94	122	147	93	64	39	28	47	40	40	41

Top line figures show deaths.

Lower line figures, number of cases

Fifthly, the population of Newark has increased a great deal since 1915 and the type of population has deteriorated markedly. The increase in poorly educated, law-defying, superstitious classes is a problem in the control of all communicable diseases. (See Chart No. 2.)

Sixthly, cases reported as clinical diphtheria by a physician are carried on our records as actual diphtheria, regardless of the fact that positive cultures are not obtained. In other words, it is not necessary to have both clinical and bacteriologic diphtheria for cases to be definitely classed as such by our Department.

CHART 2  
DIPHTHERIA

MONTHS	W A R D S																1929
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
JANUARY	29	3	9	3	7	6	7	13	12	20	12	10	17	14	13	7	182
FEBRUARY	13	7	10	2	10	6	7	10	4	12	11	6	5	11	4	10	128
MARCH	20	3	13	13	17	8	8	4	11	30	6	9	17	16	3	6	184
APRIL	27	2	7	6	12	4	7	7	6	42	10	9	10	11	11	5	176
MAY	22		8	1	12	15	1	10	11	46	7	13	6	20	10	11	193
JUNE	10	3	8		10	17	1	8	5	27	9	7	7	12	5	3	132
TOTAL	121	18	55	25	68	56	31	52	49	177	55	54	62	84	46	42	995
JULY	5		9	2	3	9	4	8	2	12	8	12	3	10	8	7	102
AUGUST	13	2	9	2	4	5	7	5	3	14	3	6	1	5	4	5	88
SEPTEMBER	7	1	5	2	4	15	1	3	6	7	2	7	3	13	2		78
OCTOBER	17	4	3	7	8	6	1	8	4	12	5	37	8	6	1	1	128
NOVEMBER	22	2	9	2	3	7	2	14	12	28	3	32	11	14	14	8	183
DECEMBER	9		9	3	1	3	2	5	7	19	10	47	4	15	2	7	143
TOTAL	194	27	99	43	91	101	48	95	83	269	86	195	92	147	77	70	1717

CHART 3  
DIPHTHERIA BY AGE SEX COLOR MONTHLY FOR YEAR 1929

	Under										5	10	15	20	25	35	45	55	65	Totals
	M	F	W	BLK.	1	1	2	3	4	5	9	14	19	24	34	44	54	64	74	
Jan.	69	113	174	8	6	12	20	20	25	83	51	15	3	11	13	5		1		182
Feb.	66	62	118	10	4	14	17	11	18	64	21	12	5	4	12	6	2	1	1	128
Mar.	100	84	168	16	3	12	15	27	21	78	62	15	3	7	15	3	1			184
April	86	90	158	18	2	19	18	20	20	79	65	14	2	6	9	1				176
May	95	98	170	23	5	10	24	22	17	78	81	20	4	2	5	3				193
June	63	69	101	31	4	6	11	14	15	50	57	16	2	1	3	2		1		132
July	49	52	88	14	2	8	7	7	7	31	49	8	5	2	2	4			1	102
Aug.	42	46	73	15	2	5	5	7	11	30	41	5	5	2	2	1	2			88
Sept.	41	37	66	12	2	3	5	3	12	25	33	6	2	1	6	4	1			78
Oct.	62	66	110	18	1	6	20	10	11	48	60	9	5		2	3	1			128
Nov.	91	92	161	22	5	7	21	16	10	59	70	27	9	6	7	4	1			183
Dec.	69	74	134	9	4	5	2	17	19	47	49	19	12	4	10	2				143
	813	904	1521	196	40	107	165	174	186	672	639	166	57	46	86	38	8	3	2	1717



Our incidence record and Newark's position in the American Medical Association chart could be materially improved by requiring all cases to have both clinical and bacteriologic signs positive before we classified cases as diphtheria.

The question of age and its relation to diphtheria occurrence has been admirably shown in the accompanying age chart, and this in turn has been verified by our Schick work. Diphtheria, as you know, occurs most frequently under 5 years of age, and that age group runs 90% Schick-positive. From 5 to 10 years is our second greatest period of diphtheria occurrence and runs about 50 to 60% Schick-

74.5% received antitoxin within 24 hours after the physician's first visit.

As to the Schick test and toxin-antitoxin status in our cases, of the total of 1717 occurring in 1929, we had 67 patients who gave a history of having been schicked or immunized some time prior to occurrence of the disease, and of these, 34 were sent to the Isolation Hospital at Soho at various dates, where from data at hand we find the following: One diagnosis changed to acute pharyngitis with rheumatic endocarditis; 2 negative cases as to clinical signs; 1 with patches on right tonsil, described as noncontagious; 5 as carriers (positive cultures only—no clinical

CHART 4

## 1928 DIPHTHERIA MORTALITY

95 Deaths; 77 white and 18 colored. No doctor in attendance 11; hospital cases 52.

How long was patient ill before doctor was called?	Same Day	1 Day	2 Days	3 Days	4 Days	5 Days	Unknown				
	7	33	24	13	7	4	7				
	7.3	34.7	25.2	13.6	7.3	4.2	7.3				
When after doctor's 1st visit was antitoxin given?	Same Day	Next Day	Third Day	Fourth Day	Fifth Day	Unknown					
	48	23	13	3	3	5					
	50.4	24.1	13.6	3.1	3.1	5.2					
When did patient die after antitoxin given?	Within 24 Hr.	48 Hrs. Later	Three Days	Four Days	Five Days	Six Days	Seven Days	Eight Days	Nine Days	Ten Days	Above Ten Days
	38	8	6	5	2	3	3	1	3	6	20
	39.4	8.4	6.3	5.2	2.1	3.1	3.1	1.1	3.1	6.3	21.0
How much anti-toxin given?	2000 Units	4000 Units	10,000 Units	20,000 Units	25,000 Units	30,000 Units	50,000 Units	None			
	18	21	12	13	17	9	1	3			
	18.9	22.1	12.6	13.6	17.8	9.4	1.1	3.1			

Upper Figures: Cases.

Lower Figures: Percentage.

positive. After 10 years of age the case rate and Schick-positive rates fall rapidly, ordinarily, although the accompanying chart shows a marked number of cases occurring in the 25 to 35 year period.

Five cases after 55 years of age in 1 year, is another unusual occurrence. (See Chart No. 3.)

An interesting side light on the diphtheria situation is shown in an analysis of 95 deaths occurring in 1928. The chart is self-explanatory. (See Chart No. 4.)

It is remarkable that 42% of these deaths were among patients seen within 24 hours after onset of symptoms; and a real compliment to the ability, judgment and activity of our physicians is due when one realizes that

signs); leaving us 25 cases of actual clinical diphtheria.

Among private patients not sent to Isolation Hospital at Soho, of which there were 33, we found: 1 follicular tonsilitis; 9 positive cultures with no clinical symptoms; 3 clinical cases with no positive cultures; and the balance of 20 cases definite clinical and bacteriologic diphtheria.

Therefore, we have 14 so-called temporary carriers, 1 pharyngitis, 1 follicular tonsilitis, 2 negatives, and 3 clinical but not bacteriologic diphtherias, and 45 active clinical and bacteriologic cases.

As to the toxin-antitoxin status—all said they had received 3 doses; 1 had 4 and 1 had

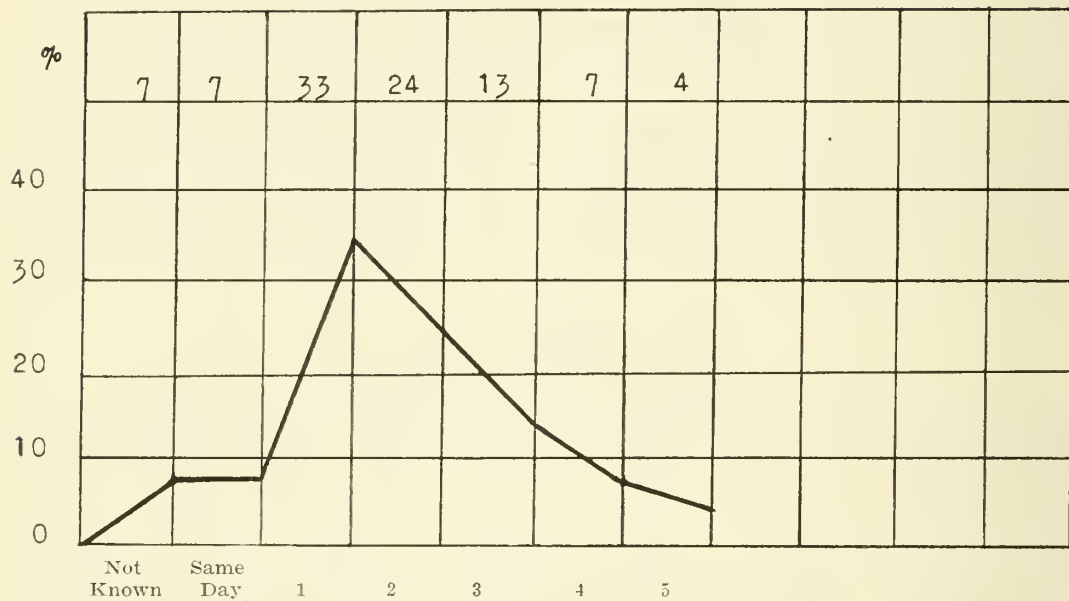
## CHART 4-A

## 1928 DIPHTHERIA MORTALITY CHART

95 Deaths—77 White—18 Colored

Hospital Cases 52. No M. D. attending 11.

## HOW LONG ILL BEFORE M.D. CALLED



## WHEN WAS ANTITOXIN GIVEN?

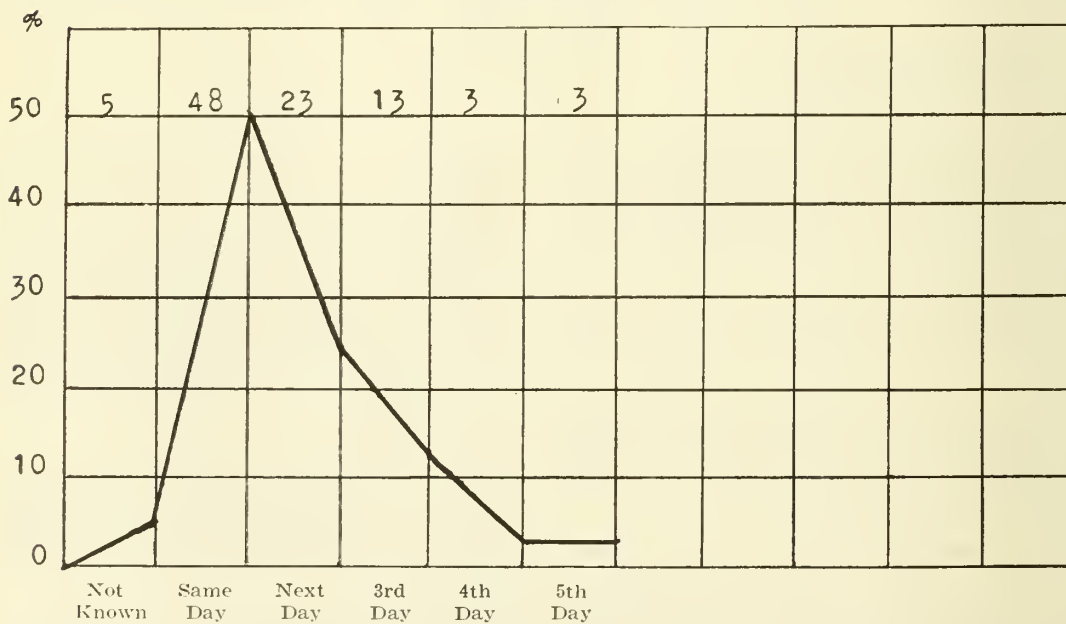
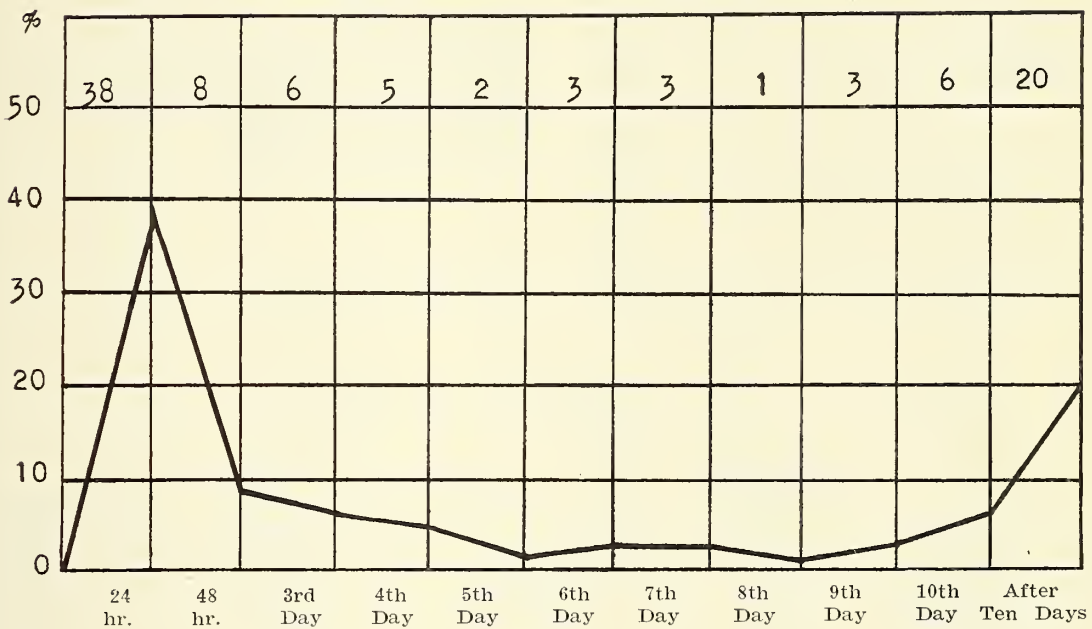




CHART 4-B

WHEN DID PATIENT DIE AFTER ANTITOXIN?



HOW MUCH ANTITOXIN GIVEN?

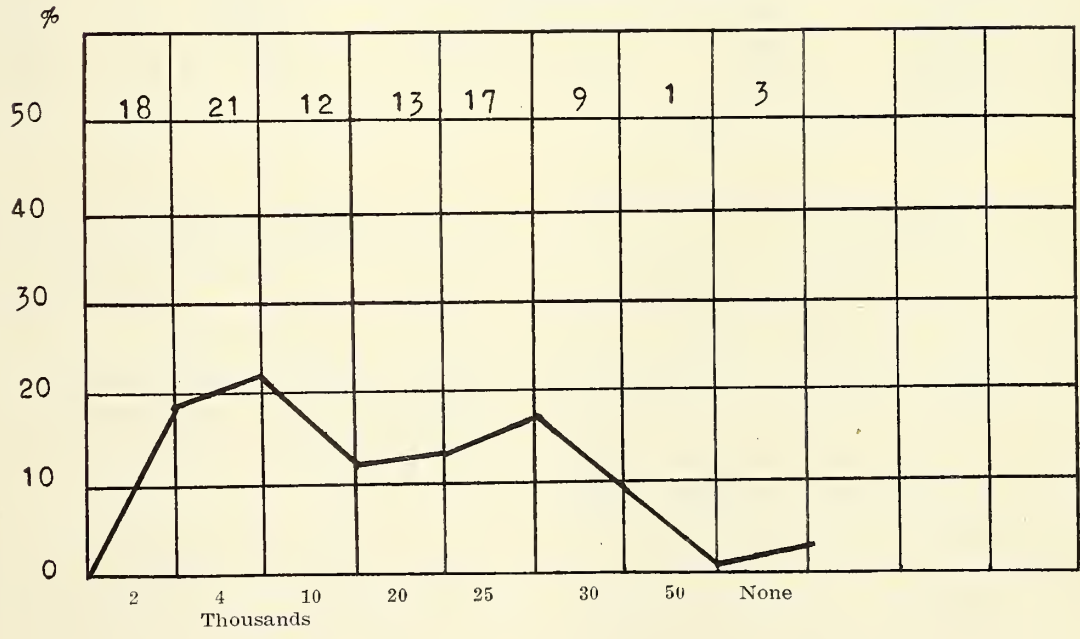


CHART 5

DOUBTFUL RECORDS

Clinical		Schick and TAT Record	
Tonsillar	8	TAT after diphtheria	1
Laryngeal	1	TAT 12/6/29 diphtheria 12/12/29	1
Pharyngeal	1	TAT 7/15/29 diphtheria 8/10/29	1
Cultural Only	3	Positive Schick 14 months after 3 doses TAT	1
		Diphtheria 2 months or less after Schick test	6
		TAT doubtful if ever given	9
		No proof Schick or TAT given	14

CHART 6

DOUBTFUL RECORDS

Name	Date of Symptoms	Symptoms	Date of T.A.	Re-Schick
Theresa Bauer	5/16	Follicular tonsillitis	1928 (3)	Unknown
Henry Pettrueba	8/20	Positive	5/29	Unknown
Joseph Pettrueba	8/24	Positive	5/29	Unknown
William Frankmutter	8/10	Cl. tonsillitis	7/15/29	Unknown
Jennie Borkmarki	10/6	Both tonsils	1928	Unknown
M. Nolcome	10/28	?	1928	Neg.
Joseph Plesti	10/5	?	1926	Unknown
Irene Plesti	10/6	?	1927	Unknown
Sophie Solys	10/7	Tonsils	1928	Unknown
G. Studzinski	10/1	Laryngeal Culture	10/1928	Unknown
Stella Polinski	11/11	Culture	3/10/27	5/28 Pos.
Ethel Sykes	11/25	Tonsils	6/1929	Unknown
Lillian Williams	11/30	Pharynx	12/1929	Unknown
Joseph Motuskul	12/12	Tonsil	12/6/29	Unknown
Rosalin Kruger	12/3	Clinic, no culture	11/13/29	No.
Joseph Domarski	12/18	Severe tonsillitis	1929	Unknown
Edward Govenski	12/21	?	1928	Unknown
Evelyn Govenski	12/21	?	1928	Unknown

2 doses, but only 5 were schicked according to the parent's statement.

After much investigation on the part of the Health Department, the trail taking us into many schools throughout the city, to Soho, to homes, and to many physicians' offices, as well as to Harrison, Perth Amboy, Whippany, Orange, etc., in order to obtain the clinical history as well as Schick and toxin-antitoxin status, we managed to get together a decent record of these cases, numbering 52 in all, and a questionable record on the balance of 15 cases. This story revealed many facts that are interesting, and with your permission I will review the doubtful records first. (See Chart No. 5.)

Of those histories where an accurate statement was obtained, I shall go into slightly more detail. We find that 13 children were re-schicked; of whom 2 were definitely Schick-positive and 11 Schick-negative. Out of these negatives we had 8 temporary carriers. Thirteen claimed to have toxin-antitoxin, but no record was proved in the schools or physicians' offices.

One case was given toxin-antitoxin after diphtheria occurred. Diphtheria cases occurring under 3 months after toxin-antitoxin were 14 in number, and in the same month 7. If you will glance at Chart No. 8 this will be more clear.



CHART 7

Name	Date of Symptom	Symptom	3 T. A.	Re-Schick
E.A.	12/12	Tonsil	Oct. 1928	No
P.B.	6/15	Tonsil-pharynx	1-6/4/29	No
A.B.	5/26	Tonsil	10/28	Pos. 12/16/29
A.B.	12/21	Mild tonsil	No record	
H.C.	11/16	Tonsil	Oct. 29	No
C.C.	7/5	No signs, culture	May 29	Neg. 12/11/29
D.C.	12/30	No signs, culture	Nov. 19/29	No
G.C.	10/10	Both tonsils	Absent	No
C.D.	5/16			Neg. 5/2/29
J.D.	5/15	Gangrenous tonsils	May 1928	No
J.E.	11/24	Right tonsil-noncontagious		11/22/29
A.F.	10/5	Culture	Oct. 1928—No data	
M.F.	5/28	Right tonsil	No	No
W.G.	8/3	Both tonsils	6/29	No
S.G.	11/17	Sl. tonsil & neg. cult.	6-28	No
W.G.	12/17	Mild tonsil	1927	No
T.H.	11/25	Severe tonsil	3/1929. No school record	No
C.H.	7/17	Naso pharynx	2/1929	No
P.F.	1/19	Not known	No	10/1928 Neg.
E.I.	12/17	Sl. both tonsils	Orange, N. J. No record	
I.I.	5/9	Both tonsils	No	4/18/28 Neg.
E.J.	5/9	Cl. tonsils	Feb. 1929	No
A.L.	8/30	Sl. left tonsil	Schick 9/1928 (1)	No
R.L.	6/6	Tonsil	11/1925	Pos. 4/17/28
D.L.	5/12	Both tonsils	1/9/28 (1)	No
P.L.	12/3	Culture	11/22/29	Neg.
A.L.	12/3	Eye and Ear	11/22/29	No record
H.L.	6/8	Tonsil	Dec. 1928	No
A.M.	12/7	Phar.	Cl./ No record	
T.M.	11/25	Phar.	4-1926	No
R.M.	5/23	Tonsil pharynx	4/25/28 (1)	No
M.M.	4/15-5/31	Carrier		5/4/29 Neg.
F.M.	10/12	Tonsil	9/26 10/10 (2)	No
R.O.	8/12	Naso-tonsil		4/4/28 Neg.
H.P.	5/20	Culture	Nov. 1927	No
T.P.	5/20	Tonsil	Nov. 1927	No
R.P.	5/21	Culture	Nov. 1927	No
M.P.	5/2	Tonsil	May 1928	No
M.P.	5/16	Tonsil	Oct. 1929	
C.P.	3/3	Tonsil	Yes—record doubtful Perth Amboy	
W.R.	5/31	Culture only	Yes	No record
L.R.	5/23	Both tonsils	11/1/28 11/22/28 (2)	12/14/28 Neg.
J.R.	7/9	Acute pharynx, rheum. & Endocarditis	3/1927	No
J.R.	12/16	Both tonsils	10/1929	No
D.S.	5/20	Carrier	11/1928	No
D.S.	5/10	Both tonsils		Yes 10/28
S.S.	5/31/29		5/15/29	No
R.T.	5/15	Culture	10/26	6-27 Neg.
M.W.	12/3	Mild tonsil	6/28	No
M.S.	12/10	Tonsil	9/1929	No

## CHART 8

POSITIVE RECORDS AS TO SCHICK AND  
T A T STATUS

Re-schick-positive	2
Negative	11
Not done	36
Done—not read	6
Schick after Diphtheria	2
Schick-negative	6
Schick-negative Carriers	8
Incomplete T A T	6
Claimed T A T—No record	*13
Diphtheria under 3 months	14
Diphtheria same month as T A T given	7

\*No record but parents certain as to procedure and dosage.

What conclusions can be drawn from this mass of figures and charts? That is the important thing. It is absolutely essential, in the first place, that a Schick test be done 3 to 6 months after a course of toxin-antitoxin, to determine if susceptibility still exists. It is a known fact that Schick work is only 90% perfect, and that a second series of toxin-antitoxin is necessary in 10% of our cases. This 10% is again 90% perfect and we know that there is a good chance of 1 in 1000 never attaining immunity.

(1) In the past 7 years I have given some individuals 3 series of toxin-antitoxin and to a few individuals 4 complete series, without any serious reaction or difficulty, and some of them still show definite positive Schick reactions. This very error, resulting as it does, in an unimmunized child in 10% of our cases, leaves a loop hole for cases to occur in an apparently immunized child. It is surprising the number of physicians who give toxin-antitoxin and state the person is immune, fail to do a Schick test, or even say it is unnecessary. The fault in this instance should not be placed on toxin-antitoxin, but on the physician.

(2) Incomplete series of toxin-antitoxin offers little or no chance of obtaining immunity. In some cases 2 doses will suffice but these cases are rare.

(3) A certain portion of our cases will develop diphtheria while under treatment and in the period of 3 or 4 months following toxin-antitoxin, before they can possibly attain

immunity. This is because toxin-antitoxin does not immunize of itself, but stimulates the body to produce natural antitoxin that is long lasting.

(4) A definite record of what has been done, kept over a period of years, is essential. This record should be maintained in the physician's office and also in the school as part of the physical record.

(5) The question of an active solution for testing is absolutely essential. Diphtheria toxin, although a violent and dangerous poison, readily disintegrates if not kept under proper conditions, or may be allowed to disintegrate because of age. For this reason, draw your supplies in small quantities, and often; remember that 4 hours after the toxin is mixed with saline it is useless.

Because Schick test solutions are easily broken down, a number of physicians only test in groups so that a definite number of positives should occur to verify the activity of the given solutions; unless 10% or more definite positive reactions occur (not pseudo or combined) one should regard the solution as inert and retest the entire group, using an entirely different lot of solution.

(6) As to technic, it is very easy to say a child is negative, when as a matter of fact he is still positive, for if our needle goes too deep, it is impossible to get a reaction.

For this reason, I advise the use of a  $\frac{1}{4}$  in. needle of 27 gauge, which is exceedingly fine. This needle should puncture the superficial layer of skin with the opening of the needle upward so that it is visible through the skin. The resultant wheal should show enlarged hair follicles and pores, or else the injection is not correct. This technic was beautifully demonstrated this past year when I personally showed 33% positive in an orphanage claimed to be 100% negative. Unless one is doing Schick work all the time it is not advisable to try on an isolated individual and claim results that can be doubted. In all my negative cases I now request that a second test be done in 6 to 12 months to verify my own technic.

(7) As to carriers—we know that they are on the increase, because of our toxin-antitoxin



activities. To themselves, they are not dangerous, but to those who are not protected they are a menace. The axiom resulting here is—"be schicked and immunized and don't worry about the other fellow".

(8) As to toxoid. It has advantages, for 2 doses at monthly intervals versus 3 at weekly intervals for toxin-antitoxin works splendidly in the very young, but with severe reactions after 3 years of age.

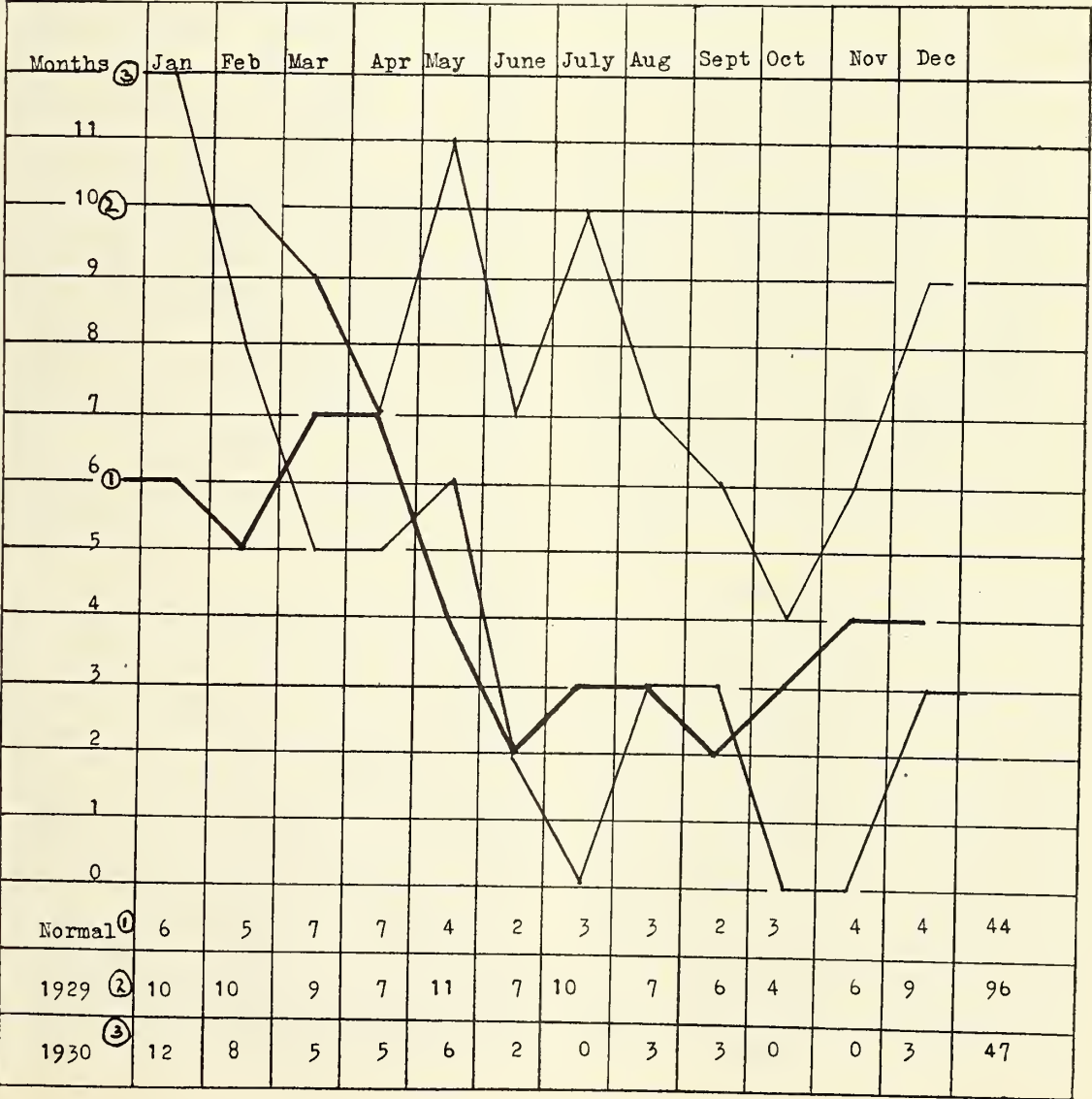
In closing, let me say again that of our 67 cases, 13 were not proved as to their status by records at schools, physician's office, etc., and were discarded as unreliable, and 18 had

doubtful records (about 50%) as to their immune status—by this I mean no active record existed although the parents insisted they were treated; 8 were temporary carriers—about 16%; and 56, or 83%, either had no re-schick or incomplete toxin-antitoxin.

Therefore, in 67 cases occurring after Schick test or toxin-antitoxin, immunization boils itself down to 11 true cases out of 1717, or a little matter of 0.6% for the calendar year 1929, a record for Schick test and toxin-antitoxin.

An additional report on the 1930 cases will be published when ready.

CHART 9  
DIPHThERIA MONTHLY MORTALITY CHART  
NEWARK, N. J.  
ACTUAL DEATHS WITH COMPARATIVE NORMAL



## DEVELOPMENT OF A POSTMORTEM SERVICE\*

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The value of postmortem studies by anatomic, histologic, bacteriologic and chemical methods needs no elucidation here. It is sufficient to refer to the recent literature indicating its wide range of benefit to the hospital, physician, family of the deceased and the community at large. Christian strikes the keynote in his statement: "The number of necropsies obtained on patients dying in the hospital is perhaps the best single index of the professional efficiency of the hospital, of the eagerness of the staff to learn, and of its teaching abilities." Hektoen points out the value of the autopsy in investigation, and in education of the physician. Improved professional morals and conscience are claimed by McKean in those hospitals where autopsies are the regular sequence to death. According to the observations of Friedrichs, attendance at autopsies encourages more precision and care at the bedside. The value of the autopsy to the surgeon is shown by Wilson and Hunt, and to the roentgenologist by Marquis. Cabot, Wilson, and Karsner conclusively show the large number of errors in diagnosis which can be disclosed by postmortems. The importance of the autopsy in vital statistics is emphasized by McKean, Wilson, and Karsner.

Part of the active and progressive program of the American Medical Association, in its standardization of hospitals, was a study of what constituted a hospital suitable for internship, and Christian, in 1926, urged adoption by the Association of an autopsy requirement, recommending 25% of autopsies on all hospital deaths as a minimum requirement. The following year (1927) the Council on Medical Education and Hospitals of the American Medical Association adopted the following resolution: "That beginning January 1, 1928,

no hospital be approved for internship which did not perform autopsies on at least 10% of the hospital deaths."

The passing of this resolution was, in my opinion, one of the outstanding accomplishments of the programs aiming toward better hospitals. Its effect has been an awakened interest on the part of hospital authorities, both medical and administrative, in the development of an autopsy service. In any consideration of this question, we must first analyze the factors involved.

The attitude of the hospital administration toward the autopsy is extremely important. Establishment and carrying out of a method of procedure conducive to results cannot obtain without the active coöperation of the administrative powers. Parnell very aptly concludes—"the percentage of postmortems may be regarded as an index of coöperation between the administration and the medical staff". The provision of suitable facilities in the form of a modern autopsy room where interested physicians may observe the autopsy without suffocating or feeling that they must put on overalls, and of proper instruments for doing autopsy, is an example of administrative coöperation. The administration by its attitude may also hamper or even nullify any attempt at obtaining autopsies. I know of a hospital in which, due to administrative antagonism toward autopsies, bodies were quickly delivered to the funeral directors before a postmortem could be performed, even though permission had been obtained from the relatives.

The pathologist plays a major rôle in the development of an autopsy service. His enthusiasm for autopsies and his ability to demonstrate to the interested physician the pathologic changes found during the examination will stimulate the interest of the resident and attending medical staffs. Proper utilization of the material, by the establishment of regular pathologic conferences, will lead to a perpetuation of this interest.

Occasionally an attending physician will at first object to the attempt of the hospital to obtain autopsies. The underlying reasons are a misconception as to the purpose of the autopsy and fear that the family of the de-

\* (Read before the American Society of Clinical Pathologists, Detroit, June 20, 1930.)



ceased might get the impression that the attending physician was ignorant of the nature of the patient's ailment, or perhaps wrong in his method of treatment. These are easily overcome by tactful demonstration of the pathology found so as not to let the physician get the impression that he is being shown up, and by assuring him that nothing will be said to the family that will in any way put him in an unfavorable light. As part of our educational program, I have strongly urged postmortem examinations on physicians or members of their families who die in the hospital. This produces a decidedly favorable reaction on the part of the layman, and I have been able to obtain permission for autopsies in many instances because of the knowledge that Dr. So-and-So, or his wife, or son, had also been subjected to this type of examination.

Perhaps the most important ally of a hospital wishing to do autopsies is the undertaker or funeral director. Realizing through sad experience that an antagonistic funeral director can greatly hamper, and in many instances completely ruin, our chances of obtaining permission, we have undertaken to study this question with the object in view of enlisting his aid. In several talks to the Association of Funeral Directors of our county, I squarely placed before the members the fact that the autopsy was inevitable if the hospitals of the county were to continue to be recognized as standard scientific institutions, and appealed to their sense of civic pride in these institutions. The problem as it applied to them was considered. They must receive the body of the deceased in proper condition for embalming and they must be given consideration as to time. A method was proposed for the postnecropsy preparation of the body, which was acceptable to them. In brief, it consists of so ordering the autopsy that the embalmer receives the body with intact circulation of the head and arms, and free from leakage. The funeral director's greatest advertisement is to present a body in such condition that the callers will be impressed by its life-like appearance. This cannot be accomplished without proper embalming of the face, and to get this, the circulation must not be

disturbed. I have adopted the method of closing by sutures the ascending aorta where it is cut off from the heart, and tying-off the beginning of the descending thoracic aorta so as to form a small cup containing the large vessels of the arms and head. If the brain has been removed the carotids are tied inside the skull, and the base of the skull is sealed with plaster of paris. This procedure enables the embalmer to pick up the brachial artery and embalm as successfully as though no autopsy had been performed. The body is then rendered free from leakage by tying-off the trachea, the esophagus and the rectum where they are cut, and by sewing up all openings communicating with the exterior. After sponging the body dry, a hardening compound is put into the abdominal and thoracic cavities.

Concerning the saving of time, it is simply necessary to have the death certificate ready for the funeral director when he calls, and to have the body ready for him at the time arranged. Our funeral directors are instructed to keep in touch with the hospital so that they may receive the body immediately upon completion of the autopsy, and the autopsy is done as quickly as possible. Personal talks with funeral directors who call at the hospital, and consideration for their feelings and time, have made many of these gentlemen so friendly disposed toward autopsies and our institution that they have often obtained permission for us when all our own argumentative resources had failed.

It has been my experience that the relatives of a deceased patient object to autopsies chiefly because of the method of approach and a misunderstanding of the purpose of the autopsy and the manner in which it is done. I have known interns to bluntly ask the family for autopsy permission in the interest of medical science and humanity. Of course, a refusal was the result. In dealing with a bereaved family, we must bear in mind that nothing must be said to hurt their acutely awakened sensibilities. The field must first be prepared for the necropsy request by sowing in their minds a logical and personal reason for the request. To this end, we dis-

cuss with the family the possibilities of the cause of death from the clinical findings, being always careful to leave a question of doubt as to the actual underlying causes of the fatal termination. Then we discuss the family; how many brothers, sisters or children does the deceased leave? How did the father, mother and grandparents die? Is there any history of similar conditions in these deaths? In cases of infection or blood conditions, how close contact was there between the deceased and his relatives? The solution is then offered. The hospital is no longer a place solely for the treatment of disease; it has now assumed the rôle of a preventor of disease. The hospital offers its resources and services to the family. It proposes to conduct a postmortem examination, and asks the family's coöperation and permission. This examination, understand, is done chiefly for the benefit of the family. John Doe does not directly benefit and is not personally interested in what conditions the deceased is passing on to his family, either by heredity or contact, but the family does benefit and should be interested. The family is requested to return to the hospital in a period of about 2 weeks to discuss with the attending physician or the pathologist the results of the examination, and to receive advice as to any tests or examinations they may recommend. The recital of cases in point, where the health and welfare of entire families were involved, may be of value in bringing home the idea of heredity and contact as potent factors in disease.

Should the question of the technic of the procedure be brought up by the relatives, they must be reassured; "we do nothing that will in any way interfere with the proper burial of the body, or in any way be visible to either the family or to the people viewing the body". This is not misrepresentation, inasmuch as the body is prepared for burial by the funeral director in such fashion that no one can detect any evidence of the autopsy, providing it has been properly done. In broaching the subject of autopsies, I have found it advisable to pick one responsible member of the family rather than address myself to the entire group.

The question of religion comes up occasionally, but has never been a serious stumbling

block in our hands. This question, particularly as it applies to people of the Jewish faith, will be fully considered in a subsequent paper. Suffice it to say that we have found that failure to obtain autopsies in Jewish families is, in the main, due to a mental hazard on the part of the person requesting permission.

We are now ready to formulate a method of procedure for obtaining autopsies. The question naturally arises as to who shall make the attempt. The ideal solution of this problem is to employ a person, preferably a physician either of the administrative or of the laboratory staff, who has the ability to talk convincingly and persuasively, and who can develop a technic of approach. This, however, is beyond the financial reach of most institutions, and therefore not feasible. The most readily available person in the average hospital for this purpose is the intern. He is prepared for this duty by frequent talks on the method of approach and the technic of obtaining postmortems. Whenever possible, his presence is required in those instances where the pathologist asks permission in cases in which he has failed. By this method, I have seen interns become very proficient in obtaining autopsy permission. A most important requisite in the person requesting autopsy is that he, himself, be thoroughly convinced of the importance and value of postmortem examinations. A rule in salesmanship to the effect that in order to sell an object, the salesman must be fully conversant with the idea or the thing he is trying to sell, and must be sold on it himself, applies here with equal force.

The pathologist must never relinquish his personal interest in the autopsy, or there will be an immediate and corresponding lag of interest on the part of the intern, with a consequent drop in autopsy percentage. I have noted a decrease in our autopsy percentage during my absence from the hospital for a few weeks, or because of diversion of my attention by other matters. It has also been my experience that this percentage increased almost immediately when I was again able to give my personal attention and come in direct contact with each hospital death.



After trying several plans, I have adopted the following as a routine procedure:

(1) The intern who is called to pronounce the patient dead must immediately fill out a laboratory death report and send it to the laboratory. This report contains information which is of value in case the intern fails to obtain permission. Data as to the cause of death, operative procedures, length of the patient's stay in the hospital, and history of injury, are included in this report.

(2) The intern must then approach the relatives of the deceased for autopsy permission.

(3) Failing to secure permission, he must bring the relatives to the office of the pathologist, who makes a further effort to obtain such permission.

(4) If the death occurs during the night and permission is refused the intern, the relatives must be requested to return and see the pathologist next morning.

(5) Permission secured, the laboratory is immediately apprised of the fact, and it in turn notifies the interested physicians as to the time of autopsy. The autopsy is then performed with the least amount of delay.

The worth of any plan is indicated by the results it produces. Since the introduction of this procedure at the Newark Beth Israel Hospital, in 1926, we have had a steadily rising autopsy percentage.

Year	Total Deaths	Total Autopsies	Hospital		Autopsy percent
			Deaths	Autopsies	
1923	182	18			10%
1924	176	28			16%
1925	192	36			18%
1926	209	88			42.5%
1927	174	75			43%
1928*	332	192	258	168	64.5%
1929	374	262	303	212	70%

\*In February 1928 we moved into a new 400 bed hospital. This accounts for the rise in deaths and autopsies.

We consider every case worth the attempt even if we are sure to fail in our mission. For, this failure is only temporary, as in each unsuccessful attempt we sow the seed for future success. There can be no doubt that some measure of our increasing percentage in the later years is due to the persistent, even though in many instances futile, attempts in the earlier years.

## THE CONTINUED EDUCATION OF THE DOCTOR\*

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President of New York Academy of Medicine,  
New York City

The invitation to address you, which I had the honor to receive from Dr. Marcus, suggested that I might speak along lines similar to those presented to the New York Academy of Medicine in the Presidential Address last January. In the course of that discussion, it was stated that some of the difficulties of present medical practice could be relieved by a return to an earlier practice when every family had a definite medical adviser who was trained in the field of general medicine, with a sufficient knowledge of special fields to know when the condition would be benefited under the care of a specialist. This comment attracted the attention of commentators. It was made quite evident that the idea found a very sympathetic response in the minds of many individuals both in and out of the profession. It is, of course, no new idea. The fact that it was seized upon as the main text of the address emphasizes still more that it has a great hold upon the imagination.

The much more important theme which it was designed to stress, dealing with the necessity for the continued education of the doctor, attracted very little attention. Even the assertion that the New York Academy of Medicine felt itself in a position to administer an additional endowment of \$2,000,000 in carrying out this purpose received little comment. In reviewing this, one may well conclude that those who commented upon the address really placed their emphasis upon the important point. It will be my endeavor to present the subject to you in such a way that you will recognize that the family doctor is the essential thing in the continued education of the doctor. I shall confine myself to a consideration of the situation as it exists in and around New York City. But you will

\* (Read at the Fifth Councilor District meeting of the Medical Society of New Jersey, Atlantic City, April 10, 1931.)

recognize that the conditions discussed are not local in their application.

There is little doubt in the mind of any one who is giving thought to matters of health, that the time is opportune for and even demands an accurate evaluation of all factors concerned in establishing and maintaining the health of the individual and the community. Paramount among these factors is the one which, in the last analysis, any solution of medical service to a community is dependent upon, the science of medicine and its efficient practice. Attention to organization, economics, distribution, and all other factors is of value only as it serves greater efficiency in medical practice. It will be my aim to develop for you one important phase of the subject which has been receiving intensive study with us.

In a general way you are familiar with the organization known as the New York Academy of Medicine, in which some of you may be Fellows. It is not to be expected that you should be informed as to the exact position that it holds in New York City and it is impossible that you should be informed of its aims and the means it is using to carry out these aims. Since I am describing my subject as it has been evolved by the Academy, I shall ask your forbearance if I seem to unduly stress its position in the plan.

Briefly, the Academy is a membership association of doctors at present numbering 1700 active resident Fellows with a less number of Associates and nonresident members. The 1700 active Fellows are nearly all practicing physicians. The Associate Fellows are engaged in allied fields; Research Fellows are Doctors of Medicine who are engaged in research in its broadest terms.

The Academy has 3 fundamental aims: the maintenance of a complete medical library, the advancement of public health interests, and the advancement of medical education. It is the latter of these which particularly concerns us at this time. And it is that phase of medical education which pertains to the doctor after he has received his degree and license to practice his profession which we would especially emphasize. But the Academy itself is in no sense a post-graduate medical institution. We have no faculty; we have no

students enrolled in our courses. Nevertheless, every activity which the Academy carries on has for its object the continued education of the doctor—the aim to improve the practitioners and their service to the community.

For several years a Committee on Medical Education has been charged with this special field and it has done splendid work in providing lectures and practical demonstrations at the Academy. Some of you are probably familiar with the annual Post-Graduate Fortnight held each fall, and the Friday afternoon practical lectures carried on through the winter. To those of you who are not, and who can afford the time to take advantage of these, I would recommend a consideration of their value, if I may do so with becoming modesty.

This committee is probably also known to many of you through the Bureau of Clinical Information and publications detailing the opportunities for study or demonstration in the various hospitals. All these activities, we have reason to believe, are of value to the doctor in New York, whether residing there or making a transient visit. But they lack one essential thing: They are not parts of a whole; their relationship oftentimes is not apparent and oftentimes nonexistent. Within the past half-decade the Academy has reached a full realization that, if it is to enjoy its privileges, it should accept its responsibilities. There was brought to our consciousness the need for a careful study of educational opportunities. From whatever angle the question was approached, one constantly returned to the fundamental point that a great wastage of these was taking place and that the recent medical graduate was too much at the mercy of chance for his continued education.

Our first approach was to determine the qualifications which would properly entitle a man to be considered as *competent* in a given field. A subcommittee was asked to attack this phase of the problem of specialism and has spent much time and hard, conscientious work. It has evolved a program for the minimum training and experience which a man should receive before he can be graded as *qualified* in a specialty. This was not so difficult to do because it was somewhat in the nature of an academic pronouncement. The



weakness of the position became apparent, however, when someone raised the question as to how the individual doctor, who desired to become proficient in any particular field, should find the necessary opportunities to meet the academic requirements. A review of the courses given in the various hospitals of the city, which had received the endorsement of the Academy as being of value, showed that they could by no means meet the requirements of training men in a really efficient way. This led the committee to lay down the following statement of opinion:

"In order to raise the standard of their own groups certain national organizations are demanding definite educational and practical requirements for admission to membership. This certainly prompts young men to seek the necessary proficiency in order to qualify, but the requirements in themselves do not provide opportunities for study. Such opportunities at present exist only to a limited degree. Only a few universities have established complete departments or separate courses, depending on their facilities. Several of them offer an advanced degree for work accomplished. A large number of hospitals, however, especially those devoted to the specialties, have established residences of from 1 to 2 years which serve as training for that specialty. These various efforts are very worthy and in their particular locality those institutions are doing commendable work. The opportunities thus offered, however, are inadequate for the total number of men who want to, or who should, take advanced courses."

"It has seemed to our committee that in order to actually help along the cause of medical education, especially in reference to advanced or graduate medical education, it is more important to provide opportunities for study than to make demands on the young medical man. On an undergraduate, we do not simply make demands; we provide the medical school in which systematized courses are offered which make it possible to pursue an orderly, well arranged course of study, and then at the end of 4 years we demand that he successfully pass in the prescribed subjects. In the same way, interns are provided with hospitals in which they continue their studies

under the direction of members of the attending staff. For the young man who wants to become a specialist, however, no such definitely arranged, orderly courses are provided. He has to shift for himself and try to pick up whatever knowledge he requires to perfect himself in his chosen field. It is time to assume a helpful attitude toward these men. We should provide opportunities for study and practical work, carefully and systematically arranged, and after that has been done we may make certain demands on them."

"With this idea in mind we may ask ourselves, and ask of this city, what we have done to further the cause of graduate education? Have we made the best of our opportunities? If we have not, what steps shall we take to utilize the clinical resources of New York City for the ultimate benefit of the people, not only of New York City but of a large part of this country?"

This extract from their report went directly to the fundamental point in the discussion. The question being raised, it immediately became our responsibility to attempt to find the correct answer. For this purpose the Board of Advanced Medical Education was set up, consisting of representatives of some 30 hospitals in New York City which had shown themselves sympathetic to the idea of taking part in the formal education of our medical graduates. These representatives have met on several occasions and have individually worked on the problem of providing adequate facilities so that the largest possible number of medical graduates can be guided and aided in their continued education, but with the thought of the specialist always uppermost.

You will recall that the original thought only included formulating qualifications for a specialist and expanded into finding means whereby the doctor who was desirous of becoming a specialist could be provided with those means. At the stage of the proceedings at which we now arrived it became quite apparent that any plan for the development of specialists which did not take into consideration the development of what we recognize as the general practitioner, was lacking in an approach to the core of the matter. No one who

has written upon, discussed, or given real thought to the problem of specialization has failed to emphasize the grave danger that lies ahead of the medical profession if its young graduates are launched into special fields without a broad fundamental training. A training which, in fact, will make of them competent, even though of limited experience, general practitioners, able to efficiently understand and take care of the major portion of the illness of the community. In spite of this clear understanding, it is quite apparent that more and more the trend is toward early specialization without sufficient basic clinical training. The Academy therefore came face to face with the entire problem of the continued education of the young graduate from the time he receives his license to practice until he is established in his profession, well qualified for general practice and, if he so elects, for specialization.

I will confess to you that when this thought presented itself as the core of the problem, we were somewhat staggered. The magnitude of such an undertaking was immediately recognized. The question at once was raised: "Is the time opportune for attacking such a job?" "And, if it be so, is there any hope that the Academy of Medicine is in a position to lead in its successful conduct?" We have not tried to evade the issue, and after careful consideration we are now launched upon an attempt to find the proper formula whereby such a goal may be reached.

During the 2 years that this situation had been developing, another thought had taken shape in the minds of those who are devoting their interest and time to this general subject. This thought related to the question as to whether we, in our organization, could take an immediate forward step. Other committees working on this phase of the project brought forward a plan for a change of our internal organization which has received approval of the Academy upon recommendation of its Council.

Heretofore, newly elected members of the Academy organization, as mentioned above, have been designated as Fellows and have had the privilege of associating themselves with all the activities of the Academy and of tak-

ing part in the administration and proceedings of all its sections. No attempt was made to carry these men forward in their educational development as individuals except as they, themselves, saw fit to develop; and the Academy recognized no change in their status after the time of their admission. Under the new plan, a newly elected individual becomes a *member* of the Academy. Upon his request, he is assigned as a participator in some one of the Sections. The activities of that Section represent the line of development along which he particularly wishes to travel. He is entirely free to enjoy all the coördinate educational advantages that other activities of the Academy and other Sections may afford; in fact, he will be encouraged to avail himself of them. At such time as any such member demonstrates to a specially selected committee, of the older men of his Section of choice, that he is proficient in his field, as proved by such tests as this committee sees fit to establish, he is *recommended for promotion to Fellowship* in that branch and, for example, becomes a Fellow of the Academy of Medicine in Otology, General Medicine, or General Surgery, etc. Having done this, we are now faced with the necessity of supplying the facilities whereby the young man may carry forward the needed development, for his promotion.

But the membership of the Academy includes less than 2000 of the total 12,000 practitioners of medicine in the metropolitan district. If the individual who has attained the rank of Fellow in any particular field receives, thereby, any advantage, it is only fair that the Academy should extend the opportunities to gain this advantage to members of the profession who are not on the Academy roll. Similar opportunities should be furnished to all young men of the profession, and, if they so desire, we should certify when these young men, whether or not members of the Academy, have attained that degree of proficiency which, in the opinion of the Academy, entitles them to recognition in a particular field. It may well be that the Academy never will have to render such service; that the doctors not belonging to the Academy will have no concern as to whether it certifies to their qualification or not; but the situation is not altered



hereby, because *the responsibility to provide educational opportunities is none the less a real one.*

And now we return to the point where I said that the comments on a previous address stressed an incidental rather than the central theme of the address; but that on further consideration I found that the incident was master of the center. My original purpose was to call attention to the need of the continued education of the doctor; incidentally, I named the general practitioners. Now, it is evident that the continued education of the doctor can only be approached through a consideration of the needs of the general practitioner. In other words, the latter is of necessity, from the standpoint of sound pedagogy, the starting point.

In New York City there is well over \$100,000,000 invested in the education of medical students and the advancement of the medical sciences incidental thereto. When these same students become doctors of medicine and receive a license from the state, they are entirely dependent upon their own initiative as to future events. After that time, neither the university nor the state concerns itself with their development. They are legally endowed with full authority to undertake the care of the sick. No one is concerned as to whether farther training or experience qualify them to minister to the pregnant woman, extirpate her uterus, determine the metabolic rate caused by a dysfunctioning thyroid, or trephine the eyeball for glaucoma. In blunt English, it is no less than fool-hardy to neglect the continued education of the doctor at this most critical period of his development when a reasonable amount of effort and the expenditure of a relatively small sum would guide him through this essential period to a real orientation of his abilities.

While nearly every medical student, upon receiving his degree, takes a hospital internship, some do not and it is a matter of unconcern in the eyes of the state whether they do or not. When they do, however, the education received as an intern is largely a matter of chance. It is well within the truth to say that both the Board of Trustees and the medical board of most of our hospitals are more con-

cerned with what the intern gives to the hospital than they are with the education he receives from it. If he be a man of unusual attainment and ability to absorb information, his associations as hospital intern are of the utmost educational value, provided the type of work done by the hospital staff is of a high grade. If, on the other hand, he be of average ability, it is quite probable that he will be so overwhelmed with the routine work which is required of him that he will have little energy left to look after his educational interests. A number of interns of more than average ability have acknowledged that they are so rushed and fatigued by carrying out their prescribed duties that they have little incentive to undertake serious study. They, of course, pick up a very considerable amount of practical education but a moment's consideration shows that, under proper arrangement, the time spent in the hospital could be made of much greater value to the intern. It is true that the American Medical Association, the Association of American Medical Colleges, and the American College of Surgeons, have each set up certain standards to which hospitals must conform if they receive accredited standing as suitable institutions for internship, but this represents only a beginning.

It is well within my memory when the leading hospitals of New York City looked askance upon the admission of undergraduate medical students to their wards and demonstration rooms for educational purposes, but 30 years have seen an enormous change in this direction. When once it was pointed out to the trustees of these institutions that they had a definite obligation toward using the facilities of their hospitals for the education of medical students, they welcomed the innovation. Not only did they welcome it but they worked hand in hand with the universities. They sought and obtained enormous sums of money for the specific purpose of providing such education. To such an extent has this idea developed at the present time that every board of hospital trustees feels the need of some affiliation with a teaching institution, and the more intimate these associations can be made the better satisfied are the trustees.

If this change of front was accomplished

in the period of much less than a generation, there is every reason to believe that when the attention of hospital authorities is definitely called to their further obligation toward the farther education of these same men, the response will be equally satisfactory and effective. The Board of Advanced Medical Education, already mentioned, is a first step in inaugurating this program.

Through definite effort and hard work by the American Medical Association; the Association of American Medical Colleges; the stimulation of some of the Foundations; a tremendous step forward has been made in giving a satisfactory education to the aspirant for the degree of Doctor of Medicine. It is now equally important that forces should be set in motion which will give definite form to granting to this aspirant opportunity and guidance through the years subsequent to his receiving his doctorate of medicine.

I imagine that if any one of you were casually asked to lay down a program for the satisfactory, continued education of the doctor through the first 5 years of his entrance into the medical profession, you would feel that a free evening would permit you to satisfactorily answer the proposal. From a rather distressing personal experience and close observation of the experience of others, I am inclined to believe that the result of your quiet evening would be to find yourself in rather a hopeless maze. In other words, it has become obvious to those of us who have spent a good deal of thought and effort upon this subject, that the problem is hardly less difficult than that which confronted those who wished to put undergraduate medical education on a sound and more or less systematized basis. This was the work of many able men over a period of years. It is quite probable that the same amount of energy must be expended in meeting the present problem. The first step, obviously, is to demonstrate the need for it and blaze a trail, the following of which may reasonably be expected to lead us to our goal.

It is requisite that a careful evaluation be made of the degree of proficiency at which our graduates arrive 5 years after their graduation, and the roads along which they travel during those 5 years, in order that we may

reach an understanding of the relative proficiency of result and efficiency of method. The hospital internship, as already pointed out, needs careful revision as the first step. In some cases the intern has an opportunity to get a fairly broad vision of the field of clinical medicine. He comes in contact with many types of cases; with men of stimulating minds; and he has an opportunity to compare methods of arriving at correct conclusions and obtaining definite results. In other cases, he is placed upon a tread-mill where, by violent physical effort, he finally reaches the top and falls over the other side with a vision that has been cramped within the narrow confines of one field. In saying this I am not referring to the hospitals for special service only, but to those covering more or less broad fields where the intern is confined to a so-called "straight service". In still other institutions the whole system connected with the intern's education is one of wasted opportunities. No one makes it any particular concern to see that the intern gets a fair deal; and often no one is concerned to see that the intern really renders a service that prevents his falling into sloppy, careless methods. He passes out of the hospital door with a diploma bearing the stamp of approval of the hospital authorities; a document in many instances of real value and representing hard endeavor and definite attainment; in other instances valueless. What then? He may, by fortunate association, unusual ability, or pleasing personality, find himself sought after and encouraged, placed in positions where his growth is provided for and where he is stimulated toward his continued education. On the other hand, lacking these fortuitous advantages, he finds himself in a precarious position of unfruitful struggle. Possessed of energy and initiative, those belonging to the latter group, with much wasted effort, ally themselves with various undertakings, and valiantly push forward by the trial and error method toward better things. During this period the great majority of them must of necessity be chiefly concerned with earning an income. In many instances they are forced to accept associations that are of little educational value and giving little professional experience, in order to meet the expense of



existence. This method of competition of course has the advantage of bringing to the top those of real ability and sound fundamental training. Rarely does such a one fail of ultimate attainment of good education and real proficiency in his profession. From this and the first group many of the leaders come. But what of the rank and file who are endowed with sufficient inherent ability and energy to become with proper encouragement back-bone rather than head of the medical profession? Lacking the qualifications for leadership, they trail behind and are gradually content to accept what seems the inevitable, and struggle to form a clientèle to which they give a service largely determined by lack of opportunity and from which they receive a meager return. I do not believe I can be challenged when I say that this group falls far short of reaching that degree of proficiency of which they are capable, under proper guidance, stimulation and fair opportunity. Is it asking too much that the head be concerned with the strengthening of the back-bone? Should not those who enjoy the privilege of leadership be greatly concerned and lend more than a helping hand toward this object?

This situation is also responsible for a great many of our younger men launching themselves into a special field with very inadequate previous training, because by this simple device they are able more promptly to get financial return and feel a certain relief from economic burden. The public, as matters at present stand, is of necessity poorly informed as to the actual qualifications of many designating themselves as specialists. The tradition, deeply rooted in the human mind, that special service is of special value and must accordingly be paid for at special rates, yields a higher immediate financial reward to these men than to those who endeavor in broader fields. This system, I repeat, is tragically wasteful and unsatisfactory. We, as members of the profession are naturally loath to squarely face the fact that many of our Fellows are, of necessity, lacking in the competency that is obviously desirable. In doing this we are open to the accusation of disloyalty and of tending to inculcate in the public mind a lack of confidence in the profession which we hold

in high honor. Some of the results and pronouncements which have been made in connection with the various studies to which I have referred have brought forth this criticism rather severely. I believe that this is begging the question. Until the profession is willing to devise and demand execution of a plan whereby those of its members who desire to specialize are encouraged and helped to the utmost to attain their fullest development, and whereby the public may have, through standards set up by the profession itself, access to information which will enable them to know who are the well trained, carefully prepared, conscientiously performing doctors, we cannot escape just criticism. The considerations here set forth, I believe, have established the need for continued medical education which I stated was obviously the first step.

The next step I referred to as the blazing of the trail along which we must travel to satisfy the need thus proved. This, with our present information, is by no means an easy problem. Reference has been made to the unsatisfactory and even chaotic condition of internships as at present existing. It is here that the young doctor gets his first real independent responsibility. It is here that he gets his first continuous opportunity to observe illness in its entirety. It is here that he is confronted with the actual application of the principles learned in the basic sciences to which he had some introduction in the clinical teaching of his pregraduate days. It is of the utmost importance that he should be under the tutelage of men who are concerned with his development; who feel a keen interest in aiding this development and who take a satisfaction in training those who will subsequently fill their places. It is therefore quite as essential that the professional staff of the hospital shall be organized as a teaching unit in the same way that the faculty of the medical college is organized as a teaching unit. Much thought and constructive effort has been placed on the development of the college curriculum and as at present administered in this country we have a confidence that it is reasonably sound pedagogically. The same thought must be given to developing the hospital organization in the same way. Allusion was

made to the fact that in too many instances the intern is merely a cog in the routine administration of the hospital without reference to the return given to him. From the standpoint we are now discussing we are desirous of giving the interns a broad outlook upon the field of medicine.

It would give me the utmost satisfaction if I were able to present to you an ideal hospital curriculum including training in the various clinical fields, and the laboratories, as well as giving due respect to the basic sciences and literary attainment. Unfortunately, I find myself totally unable to do this, but it is my earnest plea that this question receive thoughtful consideration and constructive effort on the part of educators and hospital administrators. At the present time I am particularly concerned in pointing out to you that it is a crying need and that its adequate solution is perfectly possible; as is proved by reference to what has been accomplished whenever the medical profession has put its mind seriously upon solution of such a problem. I have already alluded to 2 examples, one having to do with the tremendous improvement in our undergraduate medical teaching, and the other with the enthusiastic coöperation of the hospital in this program when the need was pointed out. Another example which I have in mind pertains to a situation relative to this whole subject which occurred in New York.

Some 15 years ago a number of observers became concerned over the conditions that existed in many of the outpatient departments of the city. An investigation of the matter showed that this anxiety seemed to be well founded, and the Committee on Public Health Relations of the Academy of Medicine was given a sum of \$15,000 by one of the Foundations to make a wider study of the problem. This resulted in finding conditions that were totally unsatisfactory and that were responsible for very unfavorable educational factors for any young doctor who worked in these outpatient departments. Lack of facilities and organization, overcrowding and rushed work, yielded an inadequate return to the patient; and resulted in hopelessly careless and almost sloppy methods on the part of the staff. Stimulated by this report, one of the Foundations gave to

the United Hospital Fund an additional sum of approximately \$500,000, expenditure of which was entrusted to a Committee on Dispensary Development for the purpose, in so far as possible, of correcting these evils and laying down a sound policy of development. Very much was accomplished and the end is not yet in sight because the Associated Outpatient Departments are now organized on a sound basis and are carrying forward the general policy set in motion.

It is our hope that we may be able to present the problem of the continued education of the doctor; its present unsatisfactory position; the crying need for its correction and the hope for definite results; in such manner that the ways and means may be found to give this whole subject the study that it requires and the help that must be extended to it if advantage is to be taken of the opportunities that lie before us. In this way, at some future date, it will be possible to present to you that well thought out, efficiently functioning, curriculum for the hospital interns which I have just regretted I cannot present to you today.

Having carried our recent graduate through his internship which, if this plan succeeds, will be a direct continuation of his undergraduate education, the even more difficult problem confronts us of guiding him through the subsequent 3 to 5 years. A certain number will continue their studies within the hospital organization as an integral part of it, in the position of residents, or other members of the professional staff. Such, will inevitably be a part of the machinery having to do with the problem of interns which we have just discussed. These men will be the strong individuals who are endowed with those qualities that fit them for leadership. The number that can so continue their training is strictly limited and constitutes a small portion of those who have passed through the preliminary stages. What will become of the others, assuming they have actually received sound educational value while serving as interns? The time has not arrived when they should be left to shift for themselves in a hit or miss fashion. In the 130 hospitals in New York City, of which 30 have shown a sympathetic



attitude toward this whole subject by organizing themselves into the Board of Advanced Medical Education, there are sufficient opportunities to supply educational advantages for practically the entire number of younger doctors in the city who, at the stage of development to which they will have been brought, will have demonstrated fitness to go on in the profession. Those who lack this fitness should take the opportunity to recognize this deficiency and turn their activities to other fields.

In recent years, not only in New York but in other communities, there has been much agitation over what is loosely known as the "open hospital". A great deal of discussion has developed along poorly thought-out lines and has resulted in the advocacy of hopelessly impractical and unproductive hypotheses. Underlying this, however, is a perfectly sound central conception, namely, that it should be possible to so organize hospitals that their educational facilities shall be available to, as nearly as possible, the entire community. Not infrequently the discussions have centered around the economic injustice of limiting the facilities of the hospitals to a certain so-called favored few. In my opinion, this is unsound and not helpful. I am strongly of the opinion that: if we will furnish the educational opportunities to our doctors; place before them a clientèle which is satisfied that it will receive competent care, individually and collectively; show that the public health interests will be adequately considered and safeguarded; then, automatically, the economic problem of the medical profession will be largely solved. The public will pay for such service gladly, and in sufficient amount so that every member of our profession, who thoroughly and conscientiously trains himself, will have ample opportunity to be adequately paid for his work. I cannot expect full agreement with this conception. But I am impressed with the fact that, except in times of great stress, those members of the profession who have had adequate educational opportunities and have utilized these to the best advantage, receive sufficient economic support for the services they render to become respected and self-respect-

ing members of the community. Barring extraneous misfortune, those who find life too confined and cramped because of economic pressure have failed in one or the other of these requisites. Whether or not my conception of this economic relation is true is somewhat beside the actual matter under discussion. I feel absolutely sure of my ground in saying that it is the duty of the leaders of the profession to provide for the continued education of the doctor; that the need for such education is imperative; and that the opportunities are at hand. My argument is that these opportunities must be utilized to meet the need.

I ask your indulgence for having made such free reference to the Academy of Medicine as concerned in this presentation. I felt the necessity for doing so because my close association with the Academy has brought me into contact with the subject and not because I conceive the Academy to be an essential part in the program. As far as New York City is concerned, it possibly stands in a position of strategic importance, but you will recall that I asked you to bear in mind that what I had to offer, while referring particularly to New York City, was equally applicable to other communities.

In reviewing what has been said, I believe you will see the justification of seeking a large endowment fund to be expended toward the attainment of the general purpose. I have faith that if I, or any one else, be successful in placing this program in its full force before those who are minded to furnish financial support when a definite need is demonstrated, that such support will be forthcoming in ample amounts.

Our program then, is somewhat as follows: A careful appraisal of all the internships at present in the various hospitals of the metropolitan district should be made. We already have information as to the number of these; the number of beds provided; the fact as to whether they are so-called straight or rotating service; and in a very general way the type of service that is offered. We must be informed, by an analysis made by trained and competent observers, as to actual details. It will

be necessary to study the various hospitals and learn the value of the educational training that the interns are receiving. While such study is in progress, material will be gathered to indicate how the various services can be best utilized with the facilities at their disposal to meet the object we have in mind. Since these hospitals are exceedingly varied in their activities, organization, financial status and so forth, it is quite obvious that each one will have to be considered as an entity. It is probable, however, that they will fall into very definite groups and that these groups will be able, more or less, to follow one systematized plan. The material at hand from such an investigation will give accurate information as to how the laboratory service, and even the basic medical sciences, shall be fitted into the general picture. With such complete information, one would be in a position to know the type of educational training each hospital can be developed to offer, and where needed a definite program could be formulated as a basis for obtaining the requisite financial support.

The hospitals of New York afford a large number of residences, which are filled by men who have received the training of an intern. Many of these are excellent educationally and are much sought after. The majority of them are in special fields and, as has already been learned, they are often held by men who have not had as much training in general medicine as is desirable. In any case, the number of such residences must be limited and will only provide educational facilities for the more favored and more competent. Therefore, the problem of helping the rank and file of our younger doctors, immediately after they have left their internships, is one of utmost importance in the whole plan. We know that in the metropolitan district, and probably in every community, there are vast educational facilities that are inadequately used. This applies particularly to those institutions which are not actively engaged in undergraduate teaching. Even in many of those, the outpatient department fails to yield more than a small part of its educational advantage. Outpatient departments properly organized and giving true value to education are the very

best places in the world for a young man to get invaluable clinical experience. Imperfectly organized and badly administered, they may well be the graveyard of his aspirations and the actual grave of his previous, carefully acquired scientific trend. It seems to me that the most vital element in this plan is concerned with creating the will to teach. With this developed, there can be no question that a means of giving the earnest young doctors full educational opportunities will be found.

While the use of the in-service of the hospital to cover this special period is more difficult, I am of the opinion that the careful study we are advocating will also find opportunity for a greatly increased use of this service.

You will have recognized the validity of our being staggered by the magnitude of the undertaking we have in mind, when its full import was presented to us. The fact that we have already received, not only a sympathetic but a really enthusiastic response from 30 of our hospitals, and that a number of them have actually set up splendidly functioning plants, encourages us to believe that the will to help already is in existence. This encouragement gives us the impetus to go forward. The consummation of the plan cannot be reached during the period of activity of myself or of many of the men who are working with us. But we intend to carry it forward far enough so that the need will be fully demonstrated and the road to follow plainly blazed.

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### WHAT THE PRESENT DAY PUBLIC THINKS OF THE MEDICAL PROFESSION\*

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This is an age of unrest in which incriminations and recriminations in regard to political, sociologic and even medical questions echo and reëcho throughout the land. It appears to be a time when suspicion and mis-

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\* (Read at the Fifth Councilor District Meeting of the Medical Society of New Jersey, Atlantic City, April 10, 1931.)



understanding fill the minds of men. The medical profession has not escaped the often caustic and usually unjustified criticisms of persons who have fallen into the error of formulating generalizations from fancied individual injustices. Let us examine 2 aspects of the problem: How does the public regard our profession? Is there any basis in fact for this opinion?

There are those who have found that critical articles in regard to the profession generally bring a return in real money from a lay press usually of lurid complexion. Hardly a month passes without the appearance of contributions in some of our better monthly journals relating to the cost of medical and hospital care. The public avidly seizes upon such statements and places in them often an unfounded reliance. There appears no one to refute or attempt to confound these criticisms. The ethics of the medical profession forbid such an effort at rebuttal. Nor does it require a great deal of thought to convince one of the shallow nature of many of these writings. The daily press contains syndicated columns on health, diet, drugs *ad libitum*—*ad nauseam*. Some of the well known members, if not known well in the scientific medical circles, of our profession have learned that it is easy to hire a secretary to turn out copper plate advice to the ailing or those who believe themselves to be so. They contend that the money which they thus secure has equal purchasing power to that which the ethical practicing physician earns with such difficulty and at the expense of so much thought and strength.

The doctor who has contracted the soul of deadening disease, that of meddling in local politics, and secures a public office, raises a pseudo-scientific voice to warn a gullible public as to the ills which may befall it. The flamboyant quack with electric signs, and even with a misleading name in the classified telephone book, entices many of the unwary into his usually bizarrely furnished suite of offices. Here and there a sporadic attempt is made to bring to judgment the unethical, illegal practitioner. But just as certain as such efforts develop, a hue and cry, often headed by mem-

bers of the intelligentsia—the pillars of society—is raised. This is usually a cry of *persecution* on the part of the jealous and mercenarily minded practitioner.

The ways of the physician and the nurse continue to diverge and there is much bickering and back-biting on the part of each of these groups; the former contending that the latter desires to be educated in the same degree as the physician, and the latter defying the physician to prove that she is not a member of a dignified profession and that she, therefore, should be coördinate with and not subordinate to the doctor. And yet, the great majority of the members of the medical profession find no time for controversy and are consumed in the business of caring for their clientèle. It must be said in all fairness to the members of the nursing group that a great majority of these women are fine, ethical and efficient in their dealings both with the patient and the physician. Amid this chaos of favorable and adverse comment, the patient confusedly endeavors to decide which is the way that will lead him to health.

It is a common comment for members of the older generation to make, in regard to a physician, that he is a gentleman of the "old school", inferring thereby that the physician of other days possessed attributes which are more or less strange to the relatively recent practitioner of medicine. One's mind reverts to the personalities of these gentlemen of the old school whom he has known and to the lovable, yet often poorly organized life which he led. The country practitioner of a quarter of a century or more ago was likely to live in one of the better homes in his community, to have an office which was conspicuous by its lack of tidiness; fur coats, medicine bags, specimens of urine which were days old, and unopened medical journals, doing their part in the creation of an atmosphere of disorderliness. His cellar was likely to be stocked with vegetables which he had taken as payment for professional services. A certain tendency to corpulency, a genial spirit, a knowledge of the history and attributes of members of families in the countryside, and even the genealogy of the farmers' live stock

was not always beyond his knowledge. A man whose regard for his own ease was nil, to whom night and day were simply periods of time; a character loved by all who knew him and yet one whose knowledge of medicine had been largely self-obtained; whose ability to explain phenomena which he saw was frequently unorthodox. And when such a man full of years and honor put aside his medicine bag and was gathered to his fathers, usually his estate was of the most pitiful dimensions. The size of his fees generally was not in any true proportion to the ability of his clientèle to pay. He frequently kept no books and assumed an air of having a favor performed when bills were actually paid.

Contrast the medical gentlemen of the very new school. For the past 2 decades it has been the privilege of the speaker to contact closely with many hundreds of the newer graduates of medicine, to have an opportunity to study their psychology, and to observe the effectiveness with which they apply the knowledge obtained in their medical schools. I have the fullest admiration for the new generation. These young men and women, having spent \$15,000 or more in securing a medical education and practical hospital experience, often look out upon the world as a financial oyster which only requires aggressiveness, and frequently self-exploitation, to successfully open. They often are not content to spend much time in dispensary work. They dislike night driving and tedious midnight work. They desire to quickly enter a specialty which requires short hours and which returns large fees. The study midnight oil is too often entirely unknown to them except when refined as gasoline. Office rents are high, motor cars expensive to maintain, wives costly to support, and they are not willing to labor through the heart-breaking probationary stages of many years of small time medicine in order to reach the pinnacles which many of our medical forefathers have so successfully scaled. And so they endeavor to discover a short cut to medical eminence by proclaiming themselves specialists in laryngology, gastro-enterology, proctology, cardiology or dermatology. To become an eminent internist, surgeon or consultant requires more than mere word of

mouth proclamation, and so, many of our younger friends are tempted to seek specialty pursuits in which a certain amount of instrumentation is an essential. This very tendency to find the easiest path has led not a few physicians into the questionable avenues of self-exploitation and of unethical advertising. Is it any wonder, then, that from an observation of the acts of some members of our own group, the public blindly inquires as to the truth and as to the type of person from which it may be obtained? This public has yet to learn that not in all instances are those who legally may append an M.D. to their names of equal skill, ethics, or trustworthiness.

Again, there seems to have crept into the medical fold, clad in the snowy garments of the innocuous lamb, certain professional wolves whose acts have reflected anything but credit on the medical profession as a whole. They appear with little notice in our large cities offering courses of instruction in psychiatry, treatment for varicose veins, and in the cure of some of the hitherto little understood ailments which have confronted the practitioner. Their voices to the uninitiated have fervent conviction as they appear on the radio and their temporary offices are filled to over-flowing with the guillible who have deserted the more modest waiting rooms of the regular, more truthful, but less dramatic, practitioners. They raise their voices high in objection in legislative halls when any regulatory measures are proposed. They are able to bring as evidence of their proficiency not a few character witnesses who otherwise stand high in their local communities. The public is still more confused thereby as to the status of the regular practitioner. And the regular medical profession, due to its traditions of silence and pacifism, remains dumb before its accusers. Nor can it be said that the medical profession is entirely blameless in so far as many of the charges which are laid at its door are concerned. Let us inquire a little more in detail in regard to the source of the opinion which is held by some groups as to: First, the lack of ethical procedure on the part of physicians; second, that physicians sometimes over-charge in a heartless way; and, third, that medicine and medical proce-



dures are frequently impotent in the treatment of disease.

There have recently appeared a number of isolated articles in the lay press relative to all of these matters. Specifically may be mentioned articles which have occurred within the past year in the Survey Graphic, American Medicine, Current History Magazine, Forum, North American Review, Ladies' Home Journal, Atlantic Monthly and others. There have also been published a number of books, notably, "Fads, Frauds and Physicians", by one Swann Harding; "Devils, Drugs and Doctors", "Merely the Patient", as well as a number of other monographs in which the question of operations, dealings with doctors, treatment in hospitals, and the inefficiency of nurses, have been treated in a more or less jocose, and, to the writer at least, humorous vein. Pursuing a steady course and with evident intent to furnish facts which will be useful in solving this problem, has been the study conducted by the Committee on the Cost of Medical Care. This committee consists of distinguished representatives of the medical profession—the American Medical Association, American Hospital Association, American Nursing Association, American College of Surgeons—as well as representatives from the public generally. There have emanated from this committee some exceedingly helpful and enlightening brochures relative to the subject being studied. Many of the writings appearing in lay journals have openly charged the medical profession with commercialism and with the employment of means for securing fees which are those commonly adopted by the hold-up artist. Not a few of these articles have suggested as a cure, the adoption of *state medicine* in some modified form. For example, in the October issue of the Atlantic Monthly, Mr. Evans Clarke argues for group practice, periodic examinations, and health insurance on the basis of fixed annual fees, believing that in this way medical bills might be lowered. This writer objects strenuously to the policy of charging a higher fee to the wealthy than to the poor. A recent editorial in the American Medical Journal, commenting on this subject, remarks the impossibility of comparing good medical advice to the

millionaire, with the price of a box of strawberries, and calls attention to the fact that a lawyer certainly will charge a millionaire more for making his will, than he would a man with a hundred thousand dollars who insists on describing the nature of his contributions throughout 25 pages more than is required by the will of the millionaire who gives it all to his favorite friend. Frederick Collins, in the Ladies' Home Journal, turns his attention to the cost of medical care and, like many others, selects examples of the cost of hospital treatment from the most exclusive institution in New York City rather than discussing the problem as it applies to the poor. When a lay person, or even a member of the profession, attempts in a 10-page article to solve economic and professional problems which have troubled society for the past century, there is little wonder that such authors usually conclude by making themselves ridiculous.

In a recent criticism of Swann Harding's "Fads, Frauds and Physicians", Morris Fishbein, in the "Saturday Night Review", concluded that the author found the great amount of material which he had gathered difficult of mental digestion, and that the volume which he has put out represents what is known to gastro-enterologists as the "indigestible residue". He speaks of the strong probability that, if state medicine is ever adopted in this country, its physicians may treat the Swann Hardings and others of his ilk while the non-Babbittized individuals will patronize independent physicians. However, one cannot pass by such volumes as that of Harding without some further comment, for Harding has, with no little skill, placed his finger on many of the sore points in our profession. He has developed an argument that, while often fallacious in the extreme, is very difficult to controvert. For example, in answer to the question, "Do Doctors Often Err?", he quotes articles by Dr. Joseph Collins, Carl Henry Davis, Chairman of the Department of Obstetrics of the American Medical Association, John B. Carnett, James T. Case, Ochsner, Mayo, Robinson, Alvarez and many others who have frequently admitted the impossibility of diagnoses and the inefficacy of

drugs and surgery in many conditions. Moreover, this writer invokes the Gospel of St. Mark, as follows: "And a certain woman which had an issue of blood for 12 years and had suffered many things of many physicians and had spent all that she had and was not bettered but rather grew worse"—to prove that the scourge of the ineffectual physician is as old as Christianity. Then he lashes the tonsil operator with unabated vehemence. He castigates the surgeon who removes innocuous appendices. With righteous zeal, he flays the doctors and the hospitals which over-charge. Not stopping in his concluding chapter for breath, as a climax to his major opus, he concludes that the solution to all these injustices lies in the adoption of the principle of state medicine. Such an attack on the 120,000 physicians in the United States, while unjustified, is dangerous because it sows in the minds even of thinking people the seed of doubt as to the ethics and the effectiveness of their own physicians whom they have trusted for many years. Has it come to a pass where the fine personal relationship of which our profession is so proud and which has always existed between patient and physician is disappearing by the changing circumstances of a newer age? A young practitioner of medicine recently remarked to me that it is impossible now for any physician to speak of a family as in the somewhat proprietary sense, for a patient in his charge today may be waiting in the office of another physician tomorrow. True it is that with development of the belief, in the minds of many, that the neighborhood doctor is effective only in treatment of minor ailments, there has arisen the idea that, whenever serious diseases develop, a consultant—a professor in the words of the substratum—must be secured. This is more than a casual happening. True also it is that the distinguished consultant from a downtown office, by word of mouth or shrug of shoulders, too often impresses the family with the futility of their erstwhile trusted physician. Such consultants, while often able to furnish helpful information, are of the type which deserves to be required, in the language of the police, to go back to pounding a beat. There is no more cruel and inexcusable act.

The fees of the consultant are not always just, and, while the family often secures a peace of mind by being assured that their physician is efficient, the amount of financial return which the latter receives is usually exceedingly disproportionate to that of the consultant. In an instance recently brought to my attention, a young physician secured with much difficulty \$50 for 25 visits to a pneumonia patient while the consultant earned \$50 in 10 minutes, adding nothing except the information that the patient was suffering with a right lower lobe pneumonitis.

To be sure, the cost of living today has increased several hundred per cent over that of half a century ago. The public demands the specialist and yet objects to paying for specialty information. It is true that oft-times such information emanates from an individual who is incapable to furnish the type of service which he purports to give. Many sins have been committed and are being committed in the name of electrocardiograph, for example. The flashing of sparks, the darkening of the room, the long and cryptic films are all impressive. While not depreciating the value of electrocardiography as an adjunct to the careful clinical study of the patient, one wonders whether the information furnished by some of these specialists, which may range from the number of days which the patient has yet to live to the exact date on which the valvular defect occurred, is always reliable. Throughout all of this play-acting, this dissembling, the quiet, unassuming, scientifically trained and sober-minded doctor is likely to lose ground. Such a physician recently remarked to me that self-effacement had no place in the present day medical profession and that it is a virtue which becomes only the clergy.

There is much demand being made by social workers and even by physicians and hospital managers for provisions for the care of the middle class. The greatest experiment of this type which is being carried on in this country appears to be at the Massachusetts General Hospital where a \$2,000,000 plant has been constructed to furnish private rooms for this economic class. Indeed, a generous Foundation has under-written the loss on this ven-



ture to the extent of \$35,000 annually. One wonders whether the middle class is doing as much as it can to care for itself. It is a trite observation that this so-called white collar class finds money to purchase furniture, pianos and automobiles when the doctor is being asked or required to wait for the payment of his bill. Some doggerel describing this situation comes to the mind of the writer at this junction:

"Send for the doctor, dearie;  
Tell him to not be late.  
We will pay the butcher, the baker  
And candle-stick maker.  
But the doctor, oh! my dear, the  
Doctor will have to wait."

(1) The difficulty of our present day situation is that we are using the wrong sort of lens to inspect the question of medical service to the community.

(2) The need for a period of readjustment along all lines.

(3) The cure? purge our ranks. The place of the county medical society? It should act as leader in public health and ethical problems.

(4) Better medical attention from the standpoint of teaching young doctors medical economics and details of their relationship to the community.

(5) The fallacy of the medical guild and of state medicine.

(6) Get someone else to fight the battles of the doctors.

(7) Most people believe in the doctor, although they may not be able to state it so beautifully as did *Robert Louis Stevenson*:

"There are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not infrequently; the artist rarely; rarelier still, the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization; and when that stage of man is done with, and only remembered to be marveled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what

are more important, Herculean cheerfulness and courage. So it is that he brings air and cheer into the sick-room, and often enough, though not so often as he wishes, brings healing."

## THE NOISES OF CIVILIZATION AND THEIR EVIL EFFECTS\*

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Many thousands of years ago man became differentiated from the other animals about him by his utilization of tools. Very crude they were in the beginning but they enabled him to overcome his enemies, secure food, and live with a little less effort; the first step in the course toward civilization. It was by tools, therefore, that he began, figuratively as well as literally, to make some noise in the world.

Although it must have been evident that it was by implements and machinery that man extended the power of his arm and gained mastery over Nature, it seems strange to us now, in this age of machine civilization, that so many centuries passed with so little improvement in this regard. Each generation seemed perfectly content with what it had inherited from the generation preceding. It was really not until the latter part of the eighteenth century that the world seemed to become conscious that the forces of nature might be turned to the practical uses of man. Then began that feverish search into her mysteries which resulted in many wonderful discoveries. Invention quickly followed discovery and when it was seen that labor saving devices brought to the owner wealth and power, there sprang into existence a multiplicity of machines.

Water power was first used but soon gave way to the more efficient power of steam, and then later was added the wonder-working

\* (Read at the 37th Annual Meeting of the American Laryngological, Rhinological and Otolaryngological Society and presented for publication in our Journal subsequent to its appearance in the *Annals Otol., Rhinol., and Laryngol.*, March 1931.)

power of electricity. Steam railways began to traverse the land; steam ships to plow through the waters of the rivers, lakes and seas; the cotton gin and the spinning jenny were invented; sewing machines appeared in every household, and harvesting machines on every farm. A new age, the age of machinery came into existence. A new era of civilization was proclaimed throughout the world.

Now, every machine with its improved methods of production, and every invention turned to use for the manufacture of goods or the transportation of man and material, brought also into existence more and worse noises. In the excitement of the newly gained wealth and power and of the dazzling new civilization, little heed was paid to the pernicious noises which accompanied. It is significant, however, that it was about this time we first began to hear of actual suffering by man from such a cause. We need only to mention as conspicuous examples, the names of Schiller, Goethe, Carlisle, Dickens and Herbert Spencer, illustrious geniuses of that era, whose lives were made miserable by noise. With the profits and conveniences of the new industrial civilization came new afflictions chargeable to the same account.

In the early and simpler world, when man lived chiefly by the pursuit of agriculture, the sounds of the world were almost only those which emanated from animate and inanimate nature. It has always been maintained, and we believe rightly, that the sounds of inanimate nature are good for the body and refreshing to the soul. However unpoetic the mind, one can hardly fail to experience pleasure in the sounds of rustling leaves or of flowing water. There is no doubt that much of the charm of music is derived from the conscious or unconscious suggestion of these elemental sounds, and we find therein the best explanation of why music soothes and exhilarates the spirit. In strong contrast to the pleasing sounds of inanimate nature, are the disagreeable sounds of artificial origin, which we call noise; and whose effect is to ruffle, irritate and annoy.

Scientifically considered, music is character-

ized by a succession of regular, rhythmic vibrations; noise, by a medley of vibrations without order or uniformity. The contrast may be strikingly shown by graphic tracings. The musical note is represented by regularly recurring, perfectly formed curves; noise by crooked, irregular, crumpled lines. The noise of the world may be roughly classified as originating from the following causes: (1) Animate nature; (2) war; (3) building and construction; (4) traffic and transportation; (5) manufacture; (6) commerce; (7) communication.

Our forefathers, who tilled the soil, hunted wild and took care of domesticated animals, were not altogether free from the annoyance of noises. The sounds emitted by animals are in the main for 2 purposes—to attract mates and to terrify enemies. The first are intended to be pleasing, and in truth we do not, as a rule, find disagreeable the cooing of doves, the neighing of horses, or the mooing of cows, and the warbling notes of song birds give almost universal delight. But we may class as noises the sounds animals make to terrify and drive away foes; the roar of the lion and the growl of the tiger must certainly be so considered. Much, however, depends upon the time and place. The distant bark of a dog is sometimes good to hear, but coming from the back-yard in the early morning hours it is an unpleasant noise.

War, since earliest times,\* has been a prolific source of noise. The warriors of old were spared the terrific din of heavy artillery, but they managed somehow to make enough noise to "fright the souls of fearful adversaries". The noises of modern warfare are stupendous and overwhelming, and their harmful effects fall upon friend more than upon foe.

The noises incident to construction are probably the most intense of all those to

\*A graphic account is to be found in Scripture of the successful employment of noise in war for the purposes of "*schrecklichkeit*": "For the Lord made the host of Syrians to hear a great noise of chariots and a noise of horses and they said to one another, Lo the King of Israel hath hired against us the Kings of the Hittites and the Kings of the Egyptians to come upon us; wherefore they arose and fled in the twilight and they left their tents and their horses and their asses, even the camp, as it was and fled for their life." Second Kings, 7:6.



which the modern city dweller is exposed. It is said that erection of the great steel skyscraper takes a heavy toll from among the workmen because of the extra-hazardous nature of some of the work. There ought also to be charged to it certain ills of which no reckoning is usually made, but which affect not only those engaged in the work, but also the innocent neighbor and the disinterested by-passer. There is nothing that better bespeaks the wisdom of Solomon than the precaution he took for the noiseless construction of his famous temple. As his own pastoral people were unskilled in such work, he engaged artisans from Tyre and Sidon, but he directed that all the work of cutting and chiseling of the stone should be done a distance away so that, as it is written, "no sound of hammer or ax or any tool was heard in the house while it was building". Would that we had a Solomon to protect our people from the ruthless builders in our great cities. He would save many from ruined ears and shattered nerves. It is not now a matter of such mild noise as that of hand-plied hammer and ax and saw, but the unearthly din of the rock drills, excavating shovels, pneumatic hammers and, worst of all, riveting machines. Scientific measurements have been made throughout the city of New York of noises from different sources, and the results recorded in terms of the decibel. The noise of riveting measured at close range registered 100 decibels—which means that the intensity of this sound was 10 billion times the minimum sound that can be heard.

In the survey of New York City noises, made by the Noise Abatement Committee specially appointed to study the question and report on these matters, it was found that 36% of the noise was chargeable to traffic and 16% to transportation. As a matter of fact it seems impossible to separate these items. Vehicular traffic is now almost altogether a matter of automobiles and naturally, with 20,000,000 of them in this country, with their horns, sirens, whistles and bells constantly on the go, they are a prolific source of noise. The worst offenders are the heavy buses, vans and trucks, especially when running on solid tires or with loose gears and chains. The noisiness

of city streets is tremendously increased by the public carriers, the surface trains, the elevated and the subway. The clatter and clang of street cars are harmful as well as disturbing to those who have to live along such routes, and conversation and business have often to be suspended at the moment of cars passing. The noises of the subway and of the elevated are of even greater intensity at close range, and they contribute much to the general street noise.

According to Dr. E. E. Free, the noisiest corner in the world is 34th Street at 6th Avenue, New York; a location, as he remarks, cursed with 3 main streams of street traffic, 3 surface car lines and 2 tracks of the elevated railway. There the intensity of the average noise is 100,000 that needed for hearing. Dr. Harvey Fletcher, in his thorough, painstaking measurement of New York City noise, found corners in which at times even this noise is exceeded.

The noise of steam railway transportation has in recent years been improved somewhat by better road-beds and better built cars. The noise of freight cars, especially when backing and filling on a side switch, with the coupling and shrill whistles of engines, leaves, however, much to be desired. The noises of water transportation are in general not so bad as those of land but for persons who live near water fronts the fog-horns and whistles of tug-boats and other craft are often very disturbing, especially at night. The newest arrival in the field of transportation is the aëroplane, with a noise all of its own, and usually of such intensity that passengers and pilot must wear ear-plugs and forego all conversation while en route; a noise of such a stunning effect to some that they remain deafened for many hours after landing.

Among noises coming under the head of commerce we would especially mention those connected with collection and delivery of merchandise; the throwing about of boxes, barrels and tin containers, are only a few that could be mentioned. The early morning call of the ice-man and the milk-man are particularly dreaded in some quarters. We must also include here the weird calls of hucksters, the hoarse shout of news-boys calling extra edi-

tions, the bell ringing of scissors grinders—all noises with which most of us would willingly dispense.

A recent great increment in the noises of civilization is attributable to the coming into common use of measures for more rapid communication, such as telegraph, telephone and radio. The click of the telegraph key or the bell ringing of the telephone seldom bother anyone except those directly in the room, but the squeak and squawk of the radio are often heard through the partition walls of an apartment, and sometimes carried out of the windows to the neighbors across the street or people on the sidewalks below. Under this head we must also include the typewriter, an instrument of communication in very common use. Notwithstanding some decided improvements that have been made in this regard most offices still cling to the old style hammer-blow type of instrument, either by reason of habit or on the score of economy. When health is considered, however, that is poor economy. Indeed, we doubt not but that business economy would be better served by a quieter environment, for under the influence of distracting noise efficiency is everywhere reduced. Errors are likely to creep into accounts, letters are formulated with more difficulty, and conversation with clients may be less convincing.

We have not, of course, named all the troublesome noises there are, but enough to be sure to indicate that this present work-a-day existence of ours is indeed very full of noise. The past decade or so has been marked by a very extraordinary advance in science and multiplication of machinery and it was inevitable that noise should correspondingly increase. The most alarming fact is that noises have not only increased in number, variety and intensity, but also in extension. Formerly confined to certain special localities, such as factories, railroad centers, and cities in distinction to the country; now, thanks to the automobile, the flying machine, the power plant and the radio, the dominion of noise has been enormously extended. Indeed, the noises of civilization now not only cover the face of the earth but they fill the air above and even invade the water under the earth. There was

a time when the tired city dweller might easily find a sequestered nook in the country where all was quiet, restful and serene, but where can one go now and not be obliged to hear raucous horns or screeching sirens, or (if by the waterside) the eternal chug-chug and shrill whistle of motor boats. There is nothing more certain than that one will have a continual treat of filtered jazz music from the inevitable radio, and it is always possible that he may have forced upon his ears the thunderous roar of low-flying planes, which are no respecters of persons and are not restricted by the laws of eminent domain.

#### EVIL EFFECTS OF NOISE ON HEALTH OF MAN

The evil effects of noise may fall chiefly on the auditory apparatus itself, or chiefly on the general nervous system. The hearing organ may be affected in one of 3 ways: (1) by suffering loss of function; (2) by developing a state of abnormal sensitiveness; or (3) by acquiring a special tolerance or habituation to the noise irritant.

It is a fundamental physiologic law that an organ treated to an excess of its proper stimulus must either adapt itself thereto or suffer harm. The auditory sense, phylogenetically considered, is the most recent arrival in the family of special senses. It is, therefore, of frailer texture and endowed with a feebler resistance than any of the others. This is no doubt the explanation of the well attested clinical observation that when the eighth nerve, composed equally of auditory and vestibular fibers, comes under the influence of toxic material in the blood, the former proves regularly to be the more vulnerable and it makes likewise understandable the fact that the auditory function can readily suffer from over-stimulation by sound.

It is pertinent in this connection to call attention to the comparatively unprotected state of the hearing organ. Its situation deep within the petrous portion of the temporal bone is indeed a good guarantee against ordinary gross traumatism, but we refer to the helpless exposure as regards the vibrations of sound. The retina is protected by eyelids, which close voluntarily or involuntarily, against injurious visual stimuli, but there are



no earlids to save Corti's organ either night or day from hurtful noise that fills the surrounding air. The tympanic muscles are perhaps intended to have a function somewhat analogous to the ciliary muscles but, if so, they are obviously inadequate, because of their feeble action and their easy susceptibility to fatigue.

*Deafness is not a common result*, notwithstanding the frequently expressed opinion of those who are waging war against the noise nuisance. It can certainly occur when the individual is exposed to an intense noise, at close quarters over a long period. Such conditions sometimes present themselves in certain occupations, like the boiler-makers' trade, where deafness is due to a nerve degeneration of high degree, and incurable, and appears in a large proportion of cases. It is a well founded observation, however, that such results occur only when the prevailing notes of the noise are in a high pitched register and of a very disagreeable character. Some interesting experiments have been made by Witmaack, Yoshi, Siebenmann and others, of exposing animals continuously in close proximity to intense sounds of various kinds and later examining postmortem the deafened ears. Degenerative changes were found in Corti's organ, and it is notable that they were chiefly located, in confirmation of Helmholtz doctrine, in parts of the cochlea corresponding with the sound pitch employed.

Sometimes the middle, rather than the internal, ear is affected by excessive noise. Sudden intense explosives, such as those made with bombs and heavy machine guns, may spend their force on the middle ear, causing rupture of the tympanic membrane and hemorrhage. This may act as a safeguard against injury to the labyrinth, but labyrinthine concussion may, nevertheless, occur at the same time.

Now, the noises to which the average citizen is exposed are seldom of such nature and intensity as to produce deafness. The usual city noise, for instance, is that of a continuous roar and hum, with only occasional severe exacerbations. What happens to the individual much exposed in this way is one of 2 things:

either he develops for the noise excessive sensitiveness, or he develops an especial tolerance—auditory hyperesthesia, or the noise habit.

*Auditory hyperesthesia* is a much more common affliction than from the literature of the subject we would be led to believe. If the otologist would more often follow the clue given by the patient who casually mentions that shrill sounds produce on his ear a decidedly painful impression, and that even ordinary sounds are distorted into unpleasant clanging effects, the diagnosis would be made oftener, I am sure, than it is.

Annoying tinnitus is also a frequent symptom, and in some cases even static functions are affected, as evidenced by more or less vertigo. These cases, uncomplicated by a middle ear disease, require not local treatment but a prolonged rest in a quiet country place if such can be found. When obliged to remain in the same environment, much help can be obtained by keeping the ears continually plugged with cotton or wool moistened with glycerin.

*Middle ear inflammation* may be present at the same time, associated with hyperemia, which tends to exaggerate the sensitiveness. In such cases, of course, the middle ear affection should have appropriate treatment, which is often found to be quite helpful.

*Noise habituation.* Since it is exceptional for the ordinary noise of our environment to be of sufficient severity to produce deafness, adaptation may take place by development of a certain tolerance for the customary noise, which eventually may take on the form of a regular noise habit. There is no question that many persons do become so habituated to noise, and so dependent upon it that they seem unable to get along without it. It is not an uncommon experience, as most of us very well know, for persons who have lived a long time in the midst of city noises to find, on suddenly being translated to the quiet of the country, that the silence is actually oppressive. They are unable to sleep, and are restless and unhappy until back again where they can hear the noise of the city streets. There are many persons of whom it may be said that they develop an actual fondness for noise, a *ptupophilia*, and so are constantly seeking pleasure

in noisy excitation. In some cases the tendency goes on to the extent of a craze or mad craving for noise, a veritable *ptupomania*. This is a malady which we fear has become already alarmingly common in America and which we believe explains the widespread popularity of the degenerate jazz.

*Disorders of the brain and nervous system.* The injurious effects of sounds are in many instances not confined to the ear but pass over to the brain and general nervous system. Sounds affect us through the association of ideas. The soothing or soul-stirring influence of music is explicable, as we have already intimated, by the conscious or unconscious suggestion of the sounds of inanimate nature. Noise, on the other hand, may be hurtful by the suggestion of physical harm and suffering: Drawing the finger nails over a rough surface, or biting on a gritty substance, is accompanied by sounds peculiar to these acts. Such a sound, when reproduced naturally, suggests injury to the human organism and gives a disagreeable impression. There is recognition, by inference of association of ideas, when certain noises are spoken of as harsh or grating, and even more directly when described as having the effect of "making the blood run cold", or causing "cold chills to run up and down the spine". Another reason to account for the disagreeable effects of noise upon the nervous system, is the arousing of what is called the "fear-reaction", an instinctive reaction inherited from our remote ancestors who had to be always on guard against surrounding enemies and to whom certain menacing sounds were a signal of impending danger. This applies especially to sharp, sudden sounds, which break unexpectedly upon an otherwise comparatively quiet environment. We know how the effect of such sound is, to make us start.

Because of the importance of the association of ideas, we can understand that the nervous system is concerned not so much with the intensity of the sound—the number of decibels that it registers—as with the disagreeable character and the suddenness. A number of experiments have been made which show that noises have a decided effect on the vital functions of man and the lower animals.

Couty and Charpentier found that noises such as the slamming of a door, caused in dogs a 10% rise of cardiac tension with acceleration of the pulse; and Landis observed in man a rise of systolic pressure of 20 mm., as a result of the explosion of a fire-cracker. Particularly interesting were the experiments reported by Dr. Foster Kennedy concerning patients in the hospital who on account of accident or operation permitted observation of direct effect of sound on brain circulation. It was found that explosion of blown-up paper bags caused a notable rise in intracranial pressure. Experiments have been made by Dr. J. B. Morgan, of North Western University, by Dr. A. T. Poffeberger, of Columbia University, and by Donald A. Laird, of Colgate University, to determine, especially from the psychologic point of view, the effect of intense noises on mental functions and incidentally its influence on other body functions. In practically all these experiments the effect was a speeding up of the motor, cardiovascular and respiratory functions; and in the performance of various mental operations there was an undue strain, fatigue, and loss of energy in comparison with silent conditions. Such experiments form a basis for explanation of the neurasthenias and psychasthenias which are reported by authority of clinical experience.

It is worth mentioning that from various parts of the country reports have come recently which indicate an unfavorable effect of loud noises on the reproductive functions. One farmer reported that because of the nearness of an aërodrome, and the terrific noises, the cows on his farm failed to calve and gave less milk; another threatened to bring suit against a company because the egg-laying of his hens had been reduced to nil. I know of no experiments directly to test the effect of sound on reproductive function, though Dr. Laird has observed that the growth and development of rabbits in noisy cubicles was decidedly poor as compared to the control, and he is of the opinion that severe noise may unfavorably affect the nutrition of infants.

It may or may not be significant that there has been a steady decline of the birth rate in all civilized countries dating from the beginning of the machine age. In England and



Wales the birth-rate in 1877 was 36.2 to every 1000 of population; in 1928 it had fallen to 16.7. From similar high rates it fell in the U. S. to 18.2; and in France to 18.2, Germany to 18.6. In other countries, where machine civilization is not a factor, the rates have remained high; in Ceylon, for instance, in 1928 it was 40, in Egypt 43.3 per 1000.

Of much greater importance than the falling birth-rate is the rising incidence of mental diseases, which has been noted in all civilized countries in recent years. This has gone on until at the present time in the United States, for example, we are confronted by the appalling reality that inmates in the institutions for the insane and feeble minded outnumber those hospitalized for all other disabilities combined. The significance of this increase in relation to noise cannot be ignored because of the experimental proof, on the one hand, of the influence of noise upon brain function and, on the other, the clinical testimony to the fact that mental derangement is often directly traceable to this cause. One factor, as already mentioned, is the strain which induces mental fatigue and irritability; another, no doubt, the loss of sleep and rest which have ever been recognized as potent causes of mental breakdown.

Consideration of these factors, pointing to the detrimental influence of noise upon intellectual faculties, brings us face to face with the question whether noise, the inevitable accompaniment of higher civilization, should not be accounted civilization's worst enemy. Advance in science is made possible only through sustained thought and concentrated attention. Noise scatters thought and is an effective hindrance to the operation of attention. Rest and sleep are fundamental necessities for the continuance of healthy mental activities. Noise produces fatigue and irritability and then denies the sleep which is more than ever needed to restore mental function. It is, then, an inescapable conclusion that noise, the by-product of civilization, unerringly tends to impede and destroy those very intellectual functions upon which progress depends. It is the ash which, unremoved, will eventually extinguish the fire.

The very discouraging thing about this

positive evil which we call noise is that, bad as it is, the future looks worse. Edison, referring to the future of the cities, says that city noise must inevitably grow greater and that the man of the future generation will as a consequence be deaf. Without accepting the pessimistic doctrine that the ultimate destiny of the city dweller is deafness, we have no doubt that the noises of the civilized world are steadily on the increase, for not only are new machines being made daily, with a consequential increment of incidental noises, but—and this is the crux of the matter—machines are being now devised and coming into use which make the increase or the magnification of sound their main or primary purpose.

The most ingenious, perhaps, of modern inventions are those which have to do with the transmission and amplification of sound. Fortunately for us, the sounds of our hearts are not ordinarily heard and the contraction of the innumerable muscles of our body take place in silence. But it is now possible, by means of a little disc held in contact with the body, to cause the pulsations of the heart to be heard throughout the room as the thumping of a heavy hammer, and the contraction of minute, invisible muscle cells, 1/5000 of an inch breadth, to be audible as loud crackling explosions. Is it not awe-inspiring, and perhaps ominous for the future, to meditate upon the possibilities if all the silent world were wakened into sound?

A short while ago, Pastor Wagner, author of the "Simple Life", lamenting the noise and bustle of the age, found consolation in the fact that "after all, the realm of silence is vaster than the realm of sound". So, perhaps, it is, but there is reason to fear that it cannot always remain so, unless the efforts of science to suppress noise can in the future be made to keep step with efforts to create it.

There is need for arousing public interest in this direction, for, notwithstanding the activities of a committee here and there, marked indifference to the subject generally prevails. Let a new wonder-making machine come to light and you find always the interest in its accomplishments easily blinds us to the evils of its noise. The need, perhaps, is more acute because of the increasing number of ptupo-

philiacs among us, who love noise not for what it means but simply for noise's sake. For esthetic reasons alone, a strong sentiment has been worked up to rid the highway of billboards and ugly signs which offend the sight. Shall we be less active to get rid of noise which not merely offends the hearing but injures it and which may do harm to the health of body and mind, and which furthermore there is good reason to believe hinders the future upward progress of the race?

The word civilization is said to be derived from the word "quies", meaning rest or quiet; the idea being that through freedom from the necessity of labor one secures leisure, rest and quiet; but the unexpected has happened and there has come, instead, unrest, disturbance and noise. Will it always be so? Or, will not science find some effectual means to rid us of this unwholesome by-product, so that civilization may eventually reach the goal which is its aim?

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## DANGER AHEAD, IN THE CATHARTIC HABIT

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Some 50 years ago a wise physician wrote a little book entitled "Constipation, Plainly Treated and Relieved Without the Use of Drugs". It was intended for circulation among laymen and doctors, both. If it could be published this year, without change, it would be an acceptable modern treatise. So, we have another evidence that there is really nothing new under the sun. Ideas get shelved and then, in time, come out in a new coat of paint—but often still recognizable.

Half a century ago there were few manicurists, salesladies, barbers or shoe salesmen who could not explain pimples, headaches, dizziness, backache, cracking finger nails, and a host of other complaints, by the word *acidity*. Now—thanks to the newspapers and magazines—most people are as familiar with

the picture of the colon as with the picture of the Prince of Wales or of Babe Ruth. Even the radio is doing its bit to protect the American colon, along with your Adam's apple. Now, instead of saying that you are *acid*, your kindly, non-medical, volunteer adviser would probably say that you are *toxic*. And then the tragedy begins—if you believe him and start self-treatment.

"He who treats himself has a fool for a patient and a knave for a doctor." Though that is a questionable dictum, it is a fact that pitfalls beset one on all sides when he attempts self-treatment. The 2 greatest errors the layman makes in self-diagnosis and self-treatment are apparent; the diagnosis may be wrong, and the treatment may be wrong. A simple, yet serious indictment.

Many who consider themselves so may really not be constipated. When it exists, constipation is inefficiency of a vital system. Its treatment is just as important as the treatment of diabetes, stomach ulcer, arthritis, or other departure from health. It warrants the same scientific study and treatment as the generally accepted medical problems. Its causes are legion, and its treatment often far at variance from popularly accepted ideas. Just as it would be laughable to be told that all people between 40 and 50 years of age should wear a size 6 B. shoe, so it is folly to think any one treatment applicable to all types of constipation.

Nature has been generous to us in having endowed our bodies with many safety factors to protect us from our own indiscretions and from accidents beyond our control. We have in the human system much duplication of function. If we, of necessity, lose a kidney or an eye, or have a lung out of commission, we can still live quite comfortably, because a fellow organ will take on the added responsibility. But, we have only *one* intestinal system. Show it the same consideration you show your automobile. Do not try to adjust the carbureter unless you are a mechanic, and then you had better have assistance of another mechanic. The cathartic habit is dangerous. Do not acquire it as the result of bad judgment or advice.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

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## NECESSITY FOR VACATIONS

With the arrival of midsummer, no one requires much urging to lay down the implements of his trade and take a vacation from routine labors. For a rising thermometer slows up other activities and the appeal of the "great outdoors" is hard to resist. Even those who have congenial occupations, who work amid pleasant surroundings, and who really love their work and dislike putting it aside, should, however, if opportunity affords, take advantage of any chance to secure a change and develop the benefits of recreation. The word *recreation* is defined as "refreshment of body or mind", and grows out of the verb—re-create—meaning "to impart new vigor" or to "refresh after labor", and that implies a necessity for replenishment of our natural forces after an expenditure of energies.

One of our contemporaries, the Editor of the Pennsylvania Medical Journal, some time ago, in an editorial entitled "physiologic tides", drew an interesting picture of the ebb and flow of living power, which picture is deserving of reproduction here:

"The comparison of an undulatory swing in the higher things in life to the tidal movements of the ocean has often been made in prose and poetry, but the highest development in all things, whether mental or physical, is attained through such change and variation; the sleeping hours are as necessary as the waking hours, rest as exercise, constructive as destructive metabolism. It would be well if this truth were more generally and thoroughly appreciated.

What is it that is causing the nervous breakdowns among our business men, society women, and students? Does not every one in this modern rushing life feel that there is more put upon him than he can possibly do; more work and play and engagements and cares? Yet, the trouble in most cases is not that people are over-worked but that they work against physiologic law. The business man feels that there can be no pause in work if he is to win success, and it is the continuity of strain that is killing him; the scholar who studies night and day loses originality and insight and finds himself becoming a book-worm and a pedant. It is the old story of 'All work and no play makes Jack a dull boy', which might well be reversed to fit the suffering from nervous exhaustion of pleasure-seekers whose lives are blighted by ennui and discontent. The best work of our lives is not done with the feverish, over-whelmed, and burdened mind which comes from continuous, unvarying strain, whether physical or mental, whether from business or pleasure. We all need the ebb-tides of reaction, relaxation, and quiet thought in order that there may follow the flood-tides of health and strength for the real decisive efforts of life."

## THE OFFICIAL TRANSACTIONS

This year we are publishing the complete Official Transactions, of the 165th Annual Meeting of the Medical Society of New Jersey, as a Supplement to the August Journal, a month earlier than usual, and we strongly recommend to all members a careful reading

of the reports submitted by officers and committees showing the accomplishments of the organization and, especially, the progress made during the past year. We believe you will be gratified by the detailed accounts of work performed and the promises of further advancement to come from plans outlined for the next fiscal year. Members who could not attend the Asbury Park meeting will find interesting reading in the full record of proceedings and will thus become conversant with all that transpired during the convention, as well as with the reports presented and action taken with regard to plans for the future. Those who did attend the convention will also probably benefit by reading the transactions, through the fact that it is difficult to follow closely and understandingly the public presentation of a report; whereas, the subject matter is easily understood and absorbed when read in the quiet atmosphere of the office or home.

In the July Journal we mentioned the unusually large number of special committees for which provision was made at Asbury Park, and referred to that fact as indicating increasing interest in some of the problems, particularly economic problems, now confronting the profession. President Hagerty has promptly appointed most of those newly provided for committees, and has requested all appointees to respond at once—expressing willingness to serve—or else to decline and make way for the appointment of others who can and will work.

On the last page of the advertising section of this Journal we present a revised list of the officers and standing committees for this fiscal year. Some of the special committees will be mentioned editorially so that other members desiring to submit information or suggestions bearing upon special problems under consideration will know with whom to communicate.

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### STUDY OF STATE MEDICINE

Among important special committees, provided for at the recent convention, is one instructed to study the question of so-called *state medicine*. This topic was presented in one form or another by the President, the

Secretary, the Executive Secretary, and other officers and members in the course of delivering committee reports or in discussion. At the present moment, no other single topic is receiving so nearly universal consideration by members of the medical profession. We have stated before that in the brief course of 5 months, May to October, in 1930, this office collected from one source alone—other state society journals—28 articles, dealing especially with the possible or probable advent, into the United States, of state medicine as it appears in “national health insurance laws” of other countries. We can now say that an additional group of 35 articles has been abstracted from the same source during the past 9 months. These 63 papers do not by a long way represent the total output of literary contributions to the subject; though they do fairly well represent the arguments for and against this “socialistic”—or, as some writers describe it, “evolutionary”—proposition.

We have learned, without surprise, that the Secretary, Dr. Morrison, and the Editor, have been accused of favoring adoption of state medicine. No charge could be much further removed from the truth. Both of us knew in advance of our speaking or writing upon the subject that some listeners or readers would probably misunderstand or misinterpret our motives, but an honest man cannot side-step duty merely to escape criticism or false accusations. We explained on various occasions that we felt impelled to direct the attention of members to this matter, offering what factual information was to us available, in order that the physicians of this state, at least, might become familiar with the subject and protect themselves against such legislation as has elsewhere worked to the detriment of the profession and of the people. “In knowledge there is strength!” If that axiomatic statement be true, let us gather in all possible knowledge concerning this matter, for we will need the strength.

The special committee appointed to investigate and study the question consists of Drs. Francis H. Todd, Chairman; Henry C. Barkhorn, W. Blair Stewart, John H. Rowland and Barclay S. Fuhrmann.



## Medical Ethics

### THE LAW IS AN ASS

(From The Kalends, Williams and Wilkins Company.)

There is no originality attached to the above caption for, as is generally well known, it first was used upon a memorable occasion by the beadle, Mr. Bumble, in *Oliver Twist*. But even the despicable Mr. Bumble did but give voice to a thought often found lurking in the minds of thinking men throughout all the ages of which there are tangible records. Let us go back to the territory presumably immediately adjacent to the Garden of Eden. Did not Cain seek to dodge the issue when he countered the leading question by naïvely inquiring: Am I my brother's keeper? According to Scripture, Cain knew jolly well what had happened to Abel.

The example of Cain is not cited as an extenuation of regarding the law as an ass, but simply as an illustration of how an issue may be avoided by asking pettifogging questions seemingly relevant but misleading. Even today, thousands of years since the time of Cain, most people are more concerned about the merits or demerits of Cain's question than they are as to the point originally at issue, viz., did or did not Cain slay Abel, and if he did so was he justified in doing it? Perhaps he was. Who knows? But certainly there are numbers of people today who invoke the aid of the law in an outrageous manner to enable them to answer in the affirmative Cain's dodging question of Am I my brother's keeper? Especially is this true in so far as their "brother's" morals are concerned. And the law aids such self-appointed custodians of morality. Why? The only intelligent answer deducible is that the law is an ass.

Is it not true that for more than a century our national government wisely steered clear of legal interference with personal habits? Such matters were sanely left to the jurisdiction of states and municipalities. About 20 years ago, however, due to the agitation of paid doers-of-good, the national government jumped into the puddle with both feet. With what result is well known to students of government and politics, medical men, and scientifically trained sociologists. The mere opinions of paid doers-of-good can have no weight when placed in the balance with the results of scientific research.

The Harrison Act upon narcotics, the Mann Act upon prostitution, and the Volstead Act prove conclusively that our national law is an ass. Scripture tells us that by their fruit ye shall know them. The fruits of the ungodly

trinity above mentioned are: Before the passage of the Harrison Act there were 100,000 drug addicts in the United States, today there are more than 2,000,000; the Mann Act was to "cure" a relatively minor and local evil, today sexual license is rampant throughout all strata of society; the Volstead Act was to so function that all jails would be emptied, crime diminished, and all homes made happy, today President Hoover authorizes the expenditure of \$6,500,000 for national penal institutions because those of all states and municipalities are filled to overflowing, he also has appointed a committee of outstanding citizens to investigate and report upon the magnitude of our national crime record, and if the output of our legal divorce mills is a criterion upon happy homes, then Mr. Volstead did but add oil to the flames.

All these pernicious results of the assinity of our national law are as naught when contrasted with the damage done to clear and straight thinking, for the essential self-discipline of body and soul has been replaced by the silly doctrine that a majority in the ballot box is the arbiter of right and wrong, and—law. It is easy to figure out why it so often happens that the law is an ass.

## Esthetics

### TIMES SQUARE HAS A SUMMER VISITOR

(From New York Times, July 3, 1931.)

Glimpsed, in Times Square, a butterfly. Not a metaphoric butterfly, but a real one, all brown and beautiful, and very gay and lively, in spite of his long trip from somewhere. Perhaps from Central Park, or across the river.

If he had been just a figure of speech a moth would, of course, have been more appropriate—to the night lights, at any rate. But this visitor was an actual creature, and he came in broad daylight. What attracted him? Maybe the cool morning breeze wafted him on his whimsical way. Maybe he smelled a rotten banana, on which even the best nurtured butterflies dote.

He flitted past the sign in a restaurant window advertising half a cold lobster with cold slaw and potato salad for 60 cents, without so much as batting a wing. Overhead a garish sign advertised the Return of Dr. Fu Manchu, but he was absorbed in deeper mysteries. He did not stop to read even "The Green Pastures" ad, although it might have allured him. Instead, he perched, this early morning voyager, a little weary but content, on the roof of a Coney Island bus.

## Collateral Reading

### THE IMMORTAL LYDIA

The above title of a recently published book naturally attracted our attention, because of interest in the general subjects of patent medicines and effective advertising to the gullible public. Once upon a time we clerked in a country drug store, and, though it was many years ago, we still remember the buying demand for Lydia Pinkham's Compound. We have not had time to make a personal review of this biography—*The Life and Times of Lydia Pinkham*, by Robert C. Washburn—but inasmuch as the *Saturday Review of Literature*, of May 30, 1931, has published a very interesting summation of the book's contents, we are taking the liberty of passing that along for the entertainment and edification of our readers:

"Reach for a vegetable instead of a sweet." This prophetic phrase appeared in the advertising of Lydia E. Pinkham's Vegetable Compound in 1891. It was a part of the skilful publicity campaign which, in the course of 50 years, converted a harmless nostrum, prepared by a farmer's wife over a kitchen stove, into the greatest of all patent medicines. Lydia Pinkham, dead since 1883, still smiles benevolently upon the world, offers her private advice to thousands of feeble-minded females, and sells several million dollars worth of her preparation every year.

The engaging story of this gigantic hoax is told by Mr. Washburn with an abundance, even a superabundance, of detail. Lydia Estes Pinkham was not only a real person but a personable person. Born in Lynn, Mass., on February 9, 1819, she was brought up as a Quaker and became in her youth a militant abolitionist and feminist. After she gave up school-teaching to marry Isaac Pinkham, her life was devoted for the next few years to child-bearing, while her husband tried everything from business to farming. Eventually, he plunged heavily into real estate and was broken in the financial crash of 1873. It was then that Mrs. Pinkham came to the rescue with her Vegetable Compound, an elixir of herbs and alcohol, prepared according to a formula originally received by her husband in cancellation of a bad debt. Hitherto she had occasionally cooked up the mixture for her family and friends in time of illness. It was now to prove equally useful in time of poverty. One of her children suggesting that they put the Compound on the market, all of the family rallied to the support of the idea. The next 5 years were spent by the mother in brewing and stewing, by the 3 sons in peddling

bottles and circulars from Boston to New York. The extracts from their correspondence given by Mr. Washburn are delightful. The Compound was advertised to cure "women's weakness", but young Dan Pinkham reported that, while men eagerly read the circulars, women tore them up if they saw anyone looking. He suggested, thoughtfully, that it would be well to mention a few men's diseases. His mother was nothing loth, being certain that her Compound would cure anything and everything. She continued to appeal mainly to women, however, and gradually came to regard herself as the savior of her sex. Recognition of this rôle was achieved in 1880 with the publication of her picture. The confidence created by so matronly and respectable a countenance was overwhelming. The sales of the Compound went bounding up, and the flood of personal letters began. Mrs. Pinkham answered these herself at first; then she trained her daughter and daughter-in-law to help her; finally women clerks were employed whom, however, she taught with equal care. She was most insistent that feminine delicacy should always be respected. The word "leg" must never be mentioned. Her modesty preferred to write, for example, that a patient had "a purple place nearly as large as her hand . . . about 8 inches above her knee on the inside of her right limb".

The Compound made the family fortunes but it did so too late to benefit greatly the original producers. Two of Mrs. Pinkham's sons had literally worked themselves to death in its behalf, Dan dying at 33 and Will at 28. Mrs. Pinkham herself lived for only 3 years after her success. Her heirs made a genuine effort to acknowledge her decease and, tactfully, to substitute her daughter as a second savior of the sex. But the world of women would have none of this. They insisted upon having their own Lydia. So the firm revived the old lady and mounted upon her posthumous wings to greater glory. Every attack upon the Compound merely increased its sales. Edward Bok's denunciation in the *Ladies' Home Journal* sent them soaring. Though the Food and Drug Act has shorn the plumage from the advertising until today the Compound is recommended, with unquestionable truth, merely "as a vegetable tonic in conditions for which this preparation is adapted", nevertheless the immortal physiognomy of Lydia Pinkham still goes marching on.

Mr. Washburn rightly emphasizes the significance of his heroine as one of the founders of modern personal advertising and as a contributor to the present reign of feminism. But he is too over-awed by the magnificence



of her achievement to do full justice to the essential comedy of her story. He wastes much space in apologia—which is much as if one should apologize for Falstaff or Bottom the weaver. There is a good deal of padding in the book. Thus a whole chapter—and a very unilluminating one—is devoted to Mrs. Eddy, simply on the grounds that she, too, disbelieved in doctors, was a self-advertiser and a feminist, and lived in the same town with Mrs. Pinkham. The endeavor to trail a whole period from Lydia's skirts is unsuccessful. To take her quite so seriously is to wrong the dear woman.

## In Lighter Vein

### Cross Marks the Spot

A man touring Europe sent back a picture post-card bearing the message:  
"Dear Son:

On the other side you will see a picture of the rock from which the Spartans used to throw their defective children. Wish you were here.—Your Dad."—Wall Street Journal.

### Change of Diet

It was the duty of Janet, the maid, to tie up Jeff, the house dog, every night before she retired. One night she failed in her duty, and next morning found Jeff loose.

He had played havoc with the contents of the larder. When the mistress heard the news, she inquired:

"Has he eaten much, Janet?"

"Every blessed thing", replied the maid, "except the dog biscuits!"—Tit-Bits.

### Voice of the Tempter

Small Boy: "I don't think the gentleman next door knows much about music."

Mother: "Why?"

"Well, he told me this morning to cut my drum open and see what was inside it."—Birmingham Gazette.

### Whiskers on It

\* Comic Artist: "This joke ought to be good, I've had it in my head for 10 years."

Heartless Editor: "Sort of aged in the wood, as it were."—Hummel.

### Oh, My!

Parent (anxiously): Nurse, is it a him or a her?

Nurse: It's a them.—Boston Transcript.

### Selfish Man

Bluebeard: You have the freedom of the entire house excepting this closet. This, you must never enter.

His Eighth Wife: Do you mean to keep an entire closet for yourself when I haven't room to hang half my things.

## Lighthouse Observations

### ACUTE HEMORRHAGE FROM CORPUS LUTEUM AND GRAAFIAN FOLLICLE

In 1917, Novak reported that a search of medical literature disclosed only 40 recorded instances of copious hemorrhage into the abdomen caused by ruptured Graafian follicle or corpus luteum. During the 13 years since that announcement, 37 additional cases have been discovered, including the case related by V. Earl Johnson, who reports the most recent search of literature (Am. Jour. Surg., 9:538, September 1930), bringing the present total up to 77. In describing his own case, Johnson discusses the etiology of this unusual condition and some of the difficulties in making a differential diagnosis.

After explaining the physiology of ovulation, he says: "It is easy to imagine injury or a solution of continuity of these fragile vessels brought on by a sudden hyperemia of the pelvic organs, as by sexual excitement, or by a sudden increase in the intravascular pressure due to sexual excitement or increased intraabdominal pressure. After injury to these vessels a hematoma forms in the corpus luteum cavity and if hemorrhage persists long enough the pressure in that cavity will become so great as to burst the wall at its weakest point. It has been proved that a large proportion (60 to 80%) of all ovaries removed at operation show hematoma formation in some part of their structure, showing the vulnerability of the smaller ovarian vessels. This bursting of the walls of the corpus luteum might eventuate in a copious hemorrhage or in a trivial one. This seems to me the theory most likely. Whether there is a pathologic condition of the ovarian (or more strictly, thecal) vessels, as shown by Schumann to be present in his case, remains unsettled. Reference to the pathologic study in my case is included in this paper. The pathologic changes in the vessels in Schumann's case is a very interesting observation, but whether there was any relation between such pathology and the hemorrhage is debatable. The question of cause and effect is not thereby demonstrated, for there is no reason why the hemorrhage could not have been a coincident condition. I do not believe that changes in the vessels alone would satisfactorily explain the occurrence of hemorrhage.

Returning to the normal physiology of the ripening Graafian follicle, we note that hemorrhage occurs into the cavity after the ovum has been expelled. This hemorrhage occurs from the thecal vessels. The additional physiologic hemorrhage from laceration through the stigma is no doubt negligible because the point of rupture has become so thinned out by pressure of the developing follicle. A pressure ischemia of an obliterative nature would seem most logical in the production of the stigma. Presuming that in the ovary a Graafian follicle is almost, but not entirely, ripe when a sudden hyperemia of the pelvic organs occurs and causes an increased intravascular pressure in the ovarian blood vessels, premature separation of the ovum within the follicle might occur. This premature separation would produce hemorrhage into the follicle and if this hemorrhage was continued sufficiently long a bursting of the follicle at its weakest point would naturally occur. Intraperitoneal hemorrhage would then take place from the thecal vessels and from the laceration in the ovary. This hemor-

rhage might be copious or trivial. I believe that in all the cases presenting serious hemorrhage such a process occurs in Graafian follicles that are not quite ready to rupture. In other words, a premature separation of the ovum, with hemorrhage, and premature rupture of the follicle, are the mechanisms producing the condition under discussion.

It is very significant that in the 25 case reports, used as a basis of study for this paper, increased intraabdominal pressure was specifically mentioned in 9 cases. Eight of those patients stated that intraabdominal pressure was increased either by vomiting or by straining at stools. In view of the frequent diagnosis of appendicitis in these cases, and realizing that the majority of appendicitis cases vomit one or more times, I am satisfied that the incidence of increased intraabdominal pressure would be greatly increased if definite records of this point had been made in all cases. It is interesting, however, that it was definitely stated in approximately one-third of the cases studied.

What is the possibility of making a correct diagnosis before operation? This study has found 77 cases reported with a diagnostic error of exactly 100%; no case having been diagnosed correctly previous to operation.

The greater number of mistakes have been made in diagnosing the condition as acute appendicitis, because of the pain in the right lower quadrant, vomiting, fever and leukocytosis. It therefore appears that the physical examination must be the all important factor. The chief differences in favor of hemorrhage from the ovary would be: (1) Pallor of skin and mucous membranes; (2) more shock; (3) fainting or sinking spells; (4) less amount of rigidity of rectus which, in fact, may be absent; (5) area of exquisite tenderness is rather definite in appendicitis, while with ovarian hemorrhage the tenderness is rather diffuse over the lower quadrants.

Differentiation from ruptured ectopic pregnancy is more difficult. They both have in common: (1) Cramp-like pains over one or the other lower quadrant; (2) fainting or sinking spells; (3) evidence of internal bleeding; (4) fever and pulse elevation; (5) leukocytosis.

Ruptured ectopic pregnancy usually gives a history of one or more abnormal menstrual periods, there is usually some vaginal bleeding, softening of the uterus just proximal to the internal os may be present, and the breasts may show the changes of early pregnancy. If there is bleeding, not menstrual in type, from the uterus, the case is probably not one of ovarian hemorrhage. This vaginal bleeding was present in only 1 of the 25 cases studied.

However, it is much easier to make the diagnosis on paper than it is in practice and, without practical experience to keep this possibility in mind, past records suggest that the condition will be confused with the 2 commoner ones, appendicitis and ectopic pregnancy. The diagnosis should not be missed by those who have previously encountered the condition."

### Mental Hygiene and the Child

(During the past year our Field Secretary has been using mental hygiene as the principal theme in her public educational work, lecturing to large groups of school teachers and pupils especially, and the following editorial from the Pennsylvania Medical Journal of March, 1931, seems appropriate for repetition here):

"Possibly no other contribution to the study of

the child's conduct and behavior has aroused the interest of the general practitioner as has mental hygiene. It is true pediatricians have always considered the mental, nervous, and physical reactions of children, but, in the field of general medicine, the psychologic aspect of the child, like consideration of the psychologic aspect of the adult, somehow or other in the passing years received minor consideration.

In arousing this interest, the true mental hygiene workers have tried in every way possible not to infringe on the territory of the pediatrician; *per contra*, they have always been conscious of the pediatrician's coöperation and his contribution to the knowledge of the child. Their efforts, therefore, have been more along the lines of reminding the general practitioner, the parents, the teacher, the nurse, the social worker and society, that childhood is the golden period for proper guidance of the growing child; that it is here the child should be given the best opportunity for development of his psychologic processes which will enable him to meet life's situations, and encouragement in developing proper adaptation and mental attitudes.

To this end, mental hygiene sponsored the mental clinics in the field either as independent units or part of our governmental agencies and the mental hospitals. Child guidance clinics were also sponsored for the further research, study, and guidance of certain types of children, all of which was for the purpose of making available places of examination of children of all ages who are not able to effect adaptation to the new world in which they find themselves.

Time has proved that mental hygiene made no error in focusing on the child as one of its first steps in the broad program of the promotion of mental health and the prevention of mental disease. The case records of these clinics reflect in numbers and types of children examined, that such agencies are meeting a very definite need. The physician in general practice will make no mistake in availing himself of the facilities of these clinics in many of his cases of problem children when consultation is desired."

## Current Events

### THE 82nd ANNUAL CONVENTION OF THE AMERICAN MEDICAL ASSOCIATION

Following close upon our own State Society's 165th Annual Meeting, and convening at a place so convenient for most of our members, the Philadelphia session of the American Medical Association attracted a large attendance from New Jersey. Our registration figures (565) being surpassed by only 2 states—Pennsylvania (2806) and New York (936). As the total number of registrants was 7006, New Jersey supplied 8% thereof.

New Orleans was chosen as the place for meeting next year.

Dr. E. H. Cary, of Dallas, Texas, was unanimously chosen as President-Elect.

From the general proceedings we have selected the following items as being of special interest to New Jersey physicians.

Dr. E. Starr Judd, President-Elect to succeed President William Gerry Morgan, addressing the House of Delegates, said, in part:

An association is as strong as its man power.



Few associations that I know of have as many capable and industrious officers and departmental heads as has the American Medical Association. This condition must be maintained. If, for any reason, a new man is needed to fill in and supervise a new bureau or to replace some one, the best person available must be obtained. In the selection of men for bureaus and committees there will constantly be competition with large organizations and foundations and the various medical centers. These foundations have much money to spend for personnel, and for this reason, if the Association is to continue to have the best, as it must have, it must expect not only to pay well but also to see that each and every one of the permanent men on these bureaus and committees is well cared for in every way. A strong financial foundation is necessary for the success of any organization and in order that our position may be maintained we must make every effort to increase our resources and to establish funds for stability and future development.

Much has been said about a new building for the headquarters of the Association, and all are looking forward to the time when this plan can be carried out. I know that the trustees have given careful thought to plans for a new building, and any help that might be offered, I am sure, would be welcome. I understand that a building fund has already been started, but it does not seem to me that it would be good business to postpone the building of the contemplated structure until we have money enough to pay for it. It seems to me that it would be a fine thing if the medical profession itself could finance the structure. First of all, a new building would be a great source of pride and satisfaction, as well as most stimulating.

A new building would give an opportunity for more and better space, for the development of our already large and active library. It takes many years to build up a library, and anything that facilitates this must be considered.

A room containing portraits of leaders in American medicine as well as those of leaders of medicine in other countries, and historical data concerning those who have accomplished much in medicine, will be most stimulating and appropriate in this building.

The new building should contain a small auditorium and several committee rooms of good size, some of which could be used as permanent quarters of the different councils.

#### BUREAU OF HEALTH AND PUBLIC INSTRUCTION

The Bureau of Health and Public Instruction has ever-increasing duties and associations. The American Medical Association must be the leader in preventive medicine and public instruction and in public health activities. Public health and preventive medicine are the most discussed subjects in medicine today, and influence and leadership in this work must be retained.

Those who attended the meetings of the White House Conference must have been impressed with the fact that so few physicians were present. While the profession welcomes coöperation from the outside organizations, nevertheless it is of interest to society and of importance to medicine for us to retain our position in these affairs.

A great deal of very commendable work has been done on public health, preventive medicine, public instruction, child welfare and all other phases of this subject by this bureau and also by certain state organizations. This is especially

evident in Illinois, New York and several other states. I make a plea that we not only continue our efforts but that we enlarge them and maintain our position.

#### BUREAU OF MEDICAL ECONOMICS

The Bureau of Medical Economics is just being organized and ultimately will have all available information regarding the cost of medical care. So much misinformation regarding economics is being broadcast that it is certainly our obligation and responsibility to set this aright. This means a great deal of study and work, and is a task for those who have had much experience in these activities. There are few actual practitioners of medicine on the 5-year committee on the costs of medical care. The statistical work of the committee has been tremendous, and a great deal of information will be available. It seems to me that a bureau made up of men from the Association would be better able to put the proper interpretation on the findings of this committee than would those in government and public health work alone. This bureau must have the best man power that can be obtained.

#### Resolutions on Appointment of a Commission on Qualifications for Specialists

Dr. Carl F. Moll, Michigan, presented the following resolutions which were referred to the Reference Committee on Medical Education:

*Whereas*, The advancement of medical science through the results of research and practical experience has stimulated many physicians to confine their professional activities to limited and special fields of medical practice, and

*Whereas*, There has thus been created class of specialists in medicine, and

*Whereas*, There appears to be a growing tendency on the part of physicians who are not properly qualified to hold themselves out as specialists; therefore be it

*Resolved*, That the Speaker of the House of Delegates shall appoint, by and with the advice of the President and the Board of Trustees, a Commission on Qualifications for Specialists, composed of 9 members; that said commission shall undertake to define the qualifications that should be required of the individual physician who desires to limit his practice to any special field and to be known as a specialist, and that in arriving at such definition the Commission on Qualifications for Specialists should give consideration to questions of education, training and clinical experience; and be it further

*Resolved*, That this commission shall give consideration to the present status of specialization in medicine, and shall define the various specialties which in the opinion of the commission may be considered as necessary for the best interests of the public and of scientific medicine; and be it further

*Resolved*, That the Council on Medical Education and Hospitals be directed to render its assistance to the Commission on Qualifications for Specialists, and that the Board of Trustees be requested to provide necessary clerical assistance; and be it further

*Resolved*, That this commission shall report to the House of Delegates concerning the advisability of the possible enactment of legislation whereby state boards of medical ex-

aminers or other bodies charged with the administration of practice acts may be empowered to issue special licenses to physicians who wish to qualify and practice as specialists; and be it further

*Resolved.* That the report of this commission and its recommendations shall be submitted to the House of Delegates, through its secretary, at the next annual session.

The Reference Committee on Medical Education considered the above resolutions and presented the following report, which was unanimously adopted:

In regard to the resolutions introduced by Dr. Carl F. Moll, Michigan, seeking definition of the qualifications of those physicians who hold themselves out as specialists, and consideration of the present status of specialization in medicine, your reference committee is in entire sympathy with the spirit of these resolutions, and after careful study of them, and after thoughtful consideration of reports presented to the committee by representative otolaryngologists, ophthalmologists, dermatologists and abdominal surgeons who appeared before the committee, your committee recommends that the Council on Medical Education and Hospitals be requested to investigate the entire subject and to make recommendations looking to the establishment of proper qualifications of physicians who shall engage in special practice, and that the report of the Council and its recommendations be submitted to the House of Delegates as soon as practicable.

#### **Resolutions on the Policy of Rendering Medical and Hospital Benefits to Veterans with Non-Service Connected Disabilities**

Dr. H. H. Shoulders, Tennessee, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations, and later adopted:

*Whereas.* The federal government has inaugurated the policy of rendering medical and hospital benefits to veterans of the World War with non-service connected disabilities; and

*Whereas.* This policy was inaugurated over the opposition of the American Medical Association; and

*Whereas.* The policy now in force, if carried to its logical conclusion, involves the construction, the staffing, and the maintenance of a sufficient number of hospitals to accommodate the hospital needs of all the veterans of the World War; and

*Whereas.* Such a policy places the federal government in unnecessary and unjust competition with the civilian hospitals and the medical profession of the United States; and

*Whereas.* The present policy is of unequal benefit to veterans by reason of the fact that many disabled veterans cannot (for one reason or another) avail themselves of the benefit; therefore be it

*Resolved.* That the House of Delegates of the American Medical Association petition the Congress of the United States and the American Legion to abandon the policy of rendering hospital and medical benefits to veterans of the World War with non-service connected disability, and substitute therefor a plan of disability insurance benefits with the following provisions:

First, the creation of a Bureau of Disability

Insurance in the Veterans' Bureaus as now constituted.

Second, the issuance of a disability insurance policy to each veteran with a disability benefit clause, as follows:

- (a) The payment of a weekly cash benefit during a period of total disability, and
  - (b) The payment of liberal hospital benefit sufficient to cover the hospital expenses of a veteran during a period of hospitalization for any disability. Such benefits to be paid to a veteran on satisfactory proof of total disability, and
  - (c) Such other provisions as are necessary for the proper administration of the act.
- Be it further

*Resolved.* That the proper officers of this association be instructed to approach the officers of the American Legion with the view to securing the adoption of the policy above set out as a part of the legislative program of the American Legion, and be it further

*Resolved.* That each state medical association be requested to form a committee whose duty it will be to approach the state and local Legion posts throughout the country with a view to securing the adoption of this program by them.

#### **Resolutions on Filling Out of Claim Proofs of Health and Accident Insurance Companies**

Dr. J. D. Brook, Michigan, presented the following resolutions, which were referred to the Reference Committee on Miscellaneous Business, and later to the Bureau of Medical Economics for study and report at next annual meeting.

*Whereas.* The Michigan State Medical Society, through its Committee on Civic and Industrial Relations, has made a comprehensive study of the question of filling out claim proofs of health and accident insurance companies; that this study has extended over a period of 3 years and has involved an extensive analysis of the subject, including a conference with representatives of several outstanding insurance companies; and that, as a result of such study and conference, the Michigan State Medical Society has adopted suitable resolutions providing for the charging of a fee to the insurance companies of not less than \$2 for filling out each preliminary and final claim proof, and

*Whereas.* The Michigan State Medical Society, by its action in adopting such resolutions, has created the interest and favor of other state medical societies in the question, which equally affects every other state medical society; and that the Michigan State Medical Society has met with considerable opposition from the insurance companies, for the reason that they object strenuously to the plan, and point out that Michigan represents only a small section of the nation and should not undertake a project affecting the policy of all the insurance companies of the United States, and

*Whereas.* The rights and privileges of the individual physicians of the entire United States are involved and are being encroached on by the health and accident insurance companies, which are continuing to insist that the services of the physician in filling out claim proofs are part of the physician's professional obligation to his patient; that the insurance



companies are unwilling to concede that the information given to them is for their own statistical use in properly adjusting claims; and that they are unwilling to pay the physician his fees; therefore be it

*Resolved*, That the House of Delegates of the American Medical Association concur with and approve the action of the Michigan State Medical Society in adopting resolutions providing for the charging of a fee of not less than \$2 for each preliminary and final claim proof; and that the House of Delegates of the American Medical Association authorize its Speaker to appoint a committee to whom this problem shall be referred; and be it further

*Resolved*, That this committee be instructed to study the facts and factors involved and to formulate a national policy that will result in remunerating physicians and surgeons for their service to insurance companies, when rendering these reports that contain expert opinions and professional advice; and be it further

*Resolved*, That the committee of the Association shall make a full report and recommendation at the next annual meeting of the House of Delegates of the American Medical Association.

#### COMMITTEE ON REPORTS OF OFFICERS

The following notes are abstracted from this committee's report:

Your committee feels that the time has arrived when the medical profession should direct all independent or extragovernmental or lay health groups.

We congratulate the association on the manner in which its offices have been conducted during the past year by its able and efficient manager and Secretary, Dr. Olin West.

We approve of the expressed desire of the Board of Trustees to acquire the land necessary for erection of a new, larger and more adaptable building to meet the growing demands of the Association. In view of the present economic conditions and the urgent needs of the Association, we believe that now is the opportune time to construct the new home.

We are gratified at the position attained by The Journal as the leader of medical publications, as well as the high standard of the special journals in their respective fields.

We appreciate the work being accomplished by Hygeia, especially in schools, and we feel that the Woman's Auxiliary is largely responsible for the rapidly increased circulation of Hygeia.

We approve of that part of the report of the Trustees advocating the education of the public on all matters pertaining to health and disease through radio talks, properly supervised, lay magazine articles and public lectures.

We especially commend the Bureau of Legal Medicine and Legislation in reference to national legislation in connection with the Jones bill (offspring of the Sheppard-Towner Maternity and Infancy Act), the narcotic legislation, the World War Veterans' legislation, the many bills introduced intended to create federal subsidies, and the government control of individual activities in the several states.

We note with pride the increasing importance of the annual Scientific Exhibit, and we recom-

mend that it be continued and expanded to the highest possible degree.

We anticipate substantial contributions from the newly created Bureau of Medical Economics. The possible benefits to the profession from constructive activities in this bureau should prove invaluable.

In reference to the care of the World War Veterans, your committee suggests that the House of Delegates go on record as being opposed unalterably to giving free medical and surgical care to those suffering from injury or disease of non-service origin.

#### FURTHER REPORT OF REFERENCE COMMITTEE ON REPORTS OF BOARD OF TRUSTEES AND SECRETARY

Dr. C. J. Whalen, Chairman, presented the following report:

At the morning session, that portion of the report of the committee having to do with the Secretary's report, which read as follows, was referred back to the committee for further consideration:

We especially condemn the examination of pre-school children *en masse* in clinics, health units and similar agencies. Such examinations cannot be but perfunctory, superficial and unsatisfactory to physicians and child alike.

The committee submits the following amendment:

We commend education of the public as to the necessity for medical supervision of the pre-school child by the family physician, and we insist that medical examination of each child should be thorough and individual.

Dr. Whalen moved the adoption of the amendment. The motion was seconded by Dr. John O. Polak, Section on Obstetrics, Gynecology and Abdominal Surgery, and carried.

#### EXECUTIVE SESSION

Two sets of resolutions under consideration were somewhat modified, and are presented here as finally acted upon:

(1) The committee has ascertained that the intent of this resolution is to urge on the membership of the American Medical Association the importance of initiating in county and state societies and in the House of Delegates of this Association resolutions on questions of medical economics and social relations, rather than in special societies of limited membership with a view to presenting to the public opinion of organized medicine as a unit and to prevent the presentation of a divided opinion before legislators and the public in general.

In order to express this more fully and more definitely, the committee has rephrased the resolution and now offers it for your consideration in the following form:

*Whereas*, The American Medical Association, through its county and state organizations and through its House of Delegates, affords to each of its members representation whereby he may express his views, and, if approved, receive the support of organized medicine; and

*Whereas*, The American Medical Association is the largest body of physicians in the United States, representing every specialty, democratically organized, and including more than 100,000 physicians; and

*Whereas*, From time to time, members of the American Medical Association, holding membership in various medical societies, organized for scientific advancement, have initiated in such bodies resolutions defining medical policies and opinions on questions of medical economics and social relations; and

*Whereas*, Resolutions on such subjects adopted by such organizations are given wide publicity as representing the views of the American medical profession, notwithstanding the fact that such bodies are of limited membership and specialistic interest; therefore be it

*Resolved*, That the House of Delegates of the American Medical Association urge all members of the Association to initiate such resolutions in their county or state societies or in the House of Delegates of the American Medical Association, and that an effort be made, through the periodicals of the Association, to inform the membership, and also all organs of public expression, that the American Medical Association is the one body, in organized medicine, entitled to speak for the vast majority of the physicians of this county.

The above resolution was adopted.

(2) Resolutions referred to the committee were presented by Dr. Roland Hammond, Rhode Island. These resolutions read as follows:

*Whereas*, The Congress has undertaken to fix the doses of wine and whiskey and brandy by legislative fiat, thus taking over the functions of pharmacologist and physician; and

*Whereas*, The Volstead Act compels physicians to betray the confidence of their patients by keeping a record of their diseases and ailments for inspection by federal prohibition agents, thus violating the traditions of the medical profession, medical ethics and the laws of a number of states; and

*Whereas*, Relief from these conditions has been sought in the courts and has been denied by the United States Supreme Court; and

*Whereas*, The Wickersham Commission has unanimously made the recommendations:

"Removal of the causes of irritation and resentment on the part of the medical profession by: (a) doing away with the statutory fixing of the amount which may be prescribed and the number of prescriptions; (b) abolition of the requirement of specifying the ailment for which liquor is prescribed on a blank to go into the public files; (c) leaving as much as possible to regulations rather than fixing details by statute." Now, therefore, be it

*Resolved*, That the Rhode Island Medical Society hereby urges each of its members to demand of his senators and congressmen the repeal of those portions of the Volstead Act which substitute the fiat of Congress for the seasoned opinion of the medical profession, which rob the sick of their right to be healed of their diseases and ailments according to the recommendations of eminent medical authorities, and which deprive the physician of his right to the free exercise of his judgment in the practice of his profession; and be it further

*Resolved*, That the delegate of the Rhode Island Medical Society to the American Medical Association be, and hereby is, instructed

to present this resolution to the House of Delegates of the American Medical Association at its next meeting for similar action.

Dr. Taylor read the following endorsement of the Reference Committee on the Reports of Board of Trustees and Secretary, presented at the Washington session in 1927:

Your committee would therefore recommend that with the coöperation of the special committee headed by Dr. Mayer, of Pennsylvania, and the excellent executive of the Bureau of Legal Medicine and Legislation, Dr. Woodward, the Board of Trustees be directed to prepare a bill to be presented to Congress correcting the unfortunate provisions of the Volstead Act limiting the amount of alcohol used, and providing such regulations as will permit doctors to prescribe whatever amounts of alcoholic liquors may be needed for their respective patients, and subject to such reasonable restrictions as may be thought wise and best after a conference with the head of the prohibition department.

Dr. Taylor moved the adoption of the above. The motion was seconded by Dr. A. J. Bedell, New York, and carried.

#### COMMUNICATION FROM PRESIDENT OF THE WOMAN'S AUXILIARY

The Secretary read the following communication from Mrs. J. Newton Hunsberger, President of the Woman's Auxiliary:

*To the Members of the House of Delegates:*

It has been my privilege for the past year to serve the Auxiliary to the American Medical Association as President. During that time we have endeavored to bring to a greater stage of perfection our organization rather than to enlarge our membership, which, however, has ably taken care of its own progress as we have now 13,000 paid members in 37 states (organized).

We have installed a new system of recording our membership which will enable states as well as counties to keep a systematic and correct file.

A tabulation of the 37 replies received to the 37 questionnaires sent out shows two thirds of the states have, now, advisory committees in their respective medical societies. Fourteen states have definite study outlines prepared for their use by the state medical society or their boards of public health. Most auxiliaries contribute to and read their state medical journals. All have participated in local, social programs and at state medical conventions, and so have increased sociability in the profession.

One new study has been prepared and distributed by the Program Committee and is being extensively used not only by our own members but also by the parent-teachers associations and the woman's clubs. The subject is "Communicable Disease Control" arranged in 4 parts: Introduction, Small-pox, Diphtheria, Typhoid Fever. To date 3500 copies have been distributed.

Our Public Relations Committee has made contacts which enable us to work through.

The Chairman of Hygeia divided the states into 5 districts with a supervising chairman over each. Letters were mailed to all state presidents seeking their coöperation. Replies received from 32



states resulted in securing the names and addresses and terms of office of about 350 county presidents and Hygeia chairmen. A survey of the reports shows that a majority of the auxiliaries are extolling the merits of Hygeia for its educational value but it is very difficult to compete with other good magazines at the present price.

Our women take much interest in working for scholarship and medical benevolence funds. They rendered great assistance during the drought disaster, individually and through the Red Cross. They have participated in May Day Child Health programs, Christmas celebrations and summer outings for children in hospitals. They have housecleaned medical libraries to the satisfaction of critical doctors.

Some legislative work has been done in states but only under the direction of the advisory committees.

A large number of our auxiliaries take special delight in collecting historical material incident to medicine and the doctor of the past.

Turn about is fair play but we do greatly appreciate the courtesy of the American Medical Association through Dr. Olin West in printing the minutes and reports of our Detroit session and also for the use of 2 pages in the Bulletin for the broadcasting of auxiliary news to our members, a much needed medium. The one regret is that all husbands are not Fellows, so frequently the Bulletin does not find its way to our members. What is the solution of this problem?

We have visited 12 different states during the year and we feel the contact personally was not only enjoyable to us but beneficial to our members.

Two thousand pieces of mail have been sent from this office and many more by the chairmen of the committees.

We have put forth special energy through our able convention committee to make the Philadelphia meeting an outstanding success for all who attend.

If our efforts during the past year are acceptable to you we are well repaid.

## Public Relations

### MORE PERSONS IN MENTAL THAN IN GENERAL HOSPITALS

As an indication of the important position occupied by mental and nervous diseases in relation to the nation's health, W. L. Treadway, assistant surgeon general of the Public Health Service, declared in an address before the Southern Medical Association at Louisville, Ky., recently, that approximately 324 persons in each 100,000 of the general population are confined to hospitals for mental and nervous diseases as compared with 192 in general hospitals, says The Modern Hospital.

"Dr. Treadway pointed out that 45.7% of all hospital beds in the United States are devoted to the care of mental and nervous diseases, and 95.4% of these are occupied", the writer continues. "Last year 128,964 new patients were admitted to these hospitals and 25,445 were readmitted. Approximately 40% of all persons applying for medical advice at public clinics or dispensaries are suffering from some mild form of mental illness.

"For the first time in history a wider interest is now being shown in disorders of the mind by the public", he said. "Failures and unconventional behavior and conduct are being interpreted not in terms of institutional provisions but in terms of personality factors having behind them mental implications.

There is a growing conviction that institutional provision alone is an unwise and uneconomic method of handling this group of the population. Instead, it is being more and more generally recognized that community sources of these personalities must be uprooted, that mental patients must have an early and adequate treatment, that underlying causes of mental diseases and adverse social behavior must be discovered by study and investigation.

"The possible solution of this situation is evolving through the development of psychiatry as a special branch of medicine", he said. "This special branch of medicine, because of its knowledge of individual needs and requirements, is equipped to offer assistance and guidance to those groups of the population who cannot comply with the liberal standards of conduct maintained by society."

### NEW JERSEY PHARMACEUTICAL ASSOCIATION

At the Annual Convention, held in Atlantic City, June 16-19, 1931, the following resolutions were unanimously adopted, and a copy was supplied to the Executive Secretary of the Medical Society of New Jersey, who was officially representing the Medical Society at that Convention, for publication in the Journal:

#### RESOLUTION No. 1

*Whereas* it is becoming a rapidly growing practice among pharmaceutical manufacturers to compound various well-known formulas and introduce them to the medical profession under proprietary names; and

*Whereas* such preparations contain ingredients of known and definite standards and which are usually found in all prescription departments of the drug stores; and

*Whereas* the pharmacist is capable of compounding these preparations without any difficulty, and

*Whereas* the introduction of these preparations under proprietary names, and in easily identified packages, designs or colors, increases the tendency to self-medication, since usually these proprietary names are of such character as to be perfectly legible to the lay public, and

*Whereas* the recommendations of these preparations through prescribing, by the medical profession, is accepted by the public as an unqualified endorsement for the preparation,

*Be It Resolved:* That the New Jersey Pharmaceutical Association, in the interests of a closer coöperation among the physician, pharmacist and patient, deprecates the practice of prescribing, recommending and fostering the use of such preparations under proprietary names.

#### RESOLUTION No. 2

*Whereas* the quality and standard of all U. S. P. & N. F. preparations must conform with the requirements of the United States Pharmacopoeia and National Formulary, and

*Whereas* the letters U. S. P. & N. F. have been symbolic of the professional pursuit of the pharmacist; and

*Whereas* the sale of such preparations under the name of the pharmacist has served as one of the remaining links whereby the public has become acquainted with the professional and ethical side of the business of the pharmacist; and

*Whereas* the market for U. S. P. & N. F. preparations has been made primarily through efforts of the pharmacist; and

*Whereas* it is becoming the practice of certain pharmaceutical manufacturers who derive their business from the pharmacist, to advertise U. S. P. & N. F. preparations under the manufacturers' brand, and

*Whereas* such advertising is designed to create in the mind of the public the impression that such preparations are in the same category as patent or proprietary medicines; and

*Whereas* such advertising also tends to create in the mind of the public that unless such preparation bears the manufacturers' label it may be an inferior product; and

*Whereas* such practice compels the pharmacist to carry an unwarranted duplication of stock; and

*Whereas* all of such practices are inimical to the profession of pharmacy:

*Be It Resolved:* That the New Jersey Pharmaceutical Association is opposed to the advertising to the public of U. S. P. & N. F. preparations under the manufacturers' brand or label.

### STAGING A HEALTH DRIVE AMONG PRE-SCHOOL CHILDREN

(From the Bulletin of the State Department of Health we have selected an item which is not only of general interest but which records a bit of history that may serve well as an example for other towns and counties of this state. If every local committee that was left in charge of the Anti-diphtheria Campaign will adopt, adjust to its own needs, and follow this procedure actively, New Jersey can be rid of diphtheria in short order.—Ed.)

Women of Woodbury, Gloucester County, recently conducted a campaign to induce parents to have the smaller children of the city protected against diphtheria.

Diphtheria prevention clinics have been held in the city since 1923 and were patronized by some 1400 youngsters. About 70 children below school age also attended these clinics, but no systematic effort was made to get young children immunized until the 4 groups of the local Parent-Teacher Association undertook the task a few months ago. The Visiting Nurse Association joined in this drive and together they worked out what the department terms an admirable type of campaign.

First, approval of the local physicians was obtained for the proposed plan. The Board of Health also approved and gave a statement for publication in a local paper. Various organizations were reached through speakers or messages and their endorsements published. Two doctors besides the school medical inspector wrote short articles for the paper. Publicity also included motion pictures and suitable literature.

Finally the city was divided into districts by the Parent-Teacher Association leaders, and canvass-

ers were assigned to make house-to-house visits. Parents were urged to take pre-school children either to family physicians or to the clinic for treatment.

This canvass resulted in a list of well over 200 names of children to be immunized. The committee notified each doctor of those whom he might expect to be brought to him. At the first pre-school clinic held, 102 children received their initial dose of toxoid, which is being used in place of toxin-antitoxin for this group.

### THE SUPERTRAINED NURSE

(From the Indiana Journal, June 1931.)

We have been asked why The Journal is opposed to advanced education and training for nurses. We thought that question had been answered in comments made heretofore, but we are very glad to say a few words more on the subject. In the first place, while there is need of the expertly trained nurse, yet she actually is required in less than 5% of the cases that require nursing. The balance of the cases will do very well with a less highly specialized type of service. Second, the expert nurse demands and should have compensation in keeping with the time and expenditure put upon her education and training, and the quality of services that she is rendering. The average sick person is unable to pay for this service, and especially when, as a result of the short hours which these highly specialized nurses will work, it becomes necessary to have 2 nurses. Third, for a very large percentage of the number of cases that actually require the services of a nurse it is quite sufficient to have a nurse who knows how to give the general care needed, who can follow orders, and who can observe and report symptoms accurately. Such nurses may be created without requiring a high school diploma or records of college attendance, or 3 or 4 years of supertechnical instruction such as is given in some nursing schools that supposedly are turning out merely general nurses. Many of these supertrained nurses have neither had nor have they sought the requisite amount of practical bedside training. Fourth, there is a crying need for thousands of old-fashioned nurses who know enough about caring for the sick to be exceedingly useful and abundantly efficient and helpful to both physician and the sick without possessing so much of the supertraining that now is demanded of every female who is licensed to nurse or holds herself out as being a trained nurse, and who is willing and glad to work for compensation that is in keeping with the ability of 75% of the sick people to pay. We have no objections of any kind whatsoever to any high standards established as a requisite and a requirement for the highly trained nurse who expects to do technical or specialized work, but we do object to compelling all those who attempt nursing to comply with such standards. Our plea is for a very satisfactory and useful nurse, duly accredited, who can be made very satisfactory to the majority of sick persons, without this supertraining and without costing the patient so much as the supertrained nurse expects and should have as compensation. We also make a plea for more nurses who are willing to take cases as they come, just as the ordinary physician does, instead of politely but emphatically refusing to nurse only certain kinds of cases, to nurse only in a hospital, or perhaps



refusing to nurse at all unless the cases and conditions relating thereto meet with exacting requirements. Lastly, we are in favor of hourly nursing in the home and group nursing in the hospital by graduate nurses when needed, thus making it possible for more people in moderate financial circumstances to afford the graduate nurse.

## School Health Department

### PUPIL SUPERVISION

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton, N. J.

#### Home Visiting

Nurses are frequently required to visit the homes of pupils absent from school for unknown cause. The value lies in the first-hand information obtained and in the opportunity of imparting instructions to the mother. However, attendance work should not be allowed to interfere with other duties of the nurse.

By having attendance officers report to the nurse daily, it is possible to keep a check on all absences. The period allowed to elapse before following-up an absence should rarely exceed 2 days.

#### Keeping Schools Open

Detection of new cases and contacts is facilitated by keeping schools open in time of epidemic. With proper precautions, the amount of exposure at school can be kept at a minimum; less, it is thought, than occurs among children when schools are closed.

With pupils at school, it is possible to hold inspections once a day, or more often if desired. It is possible to train and instruct pupils at such times in how to protect themselves, and in what to tell their parents. It is also possible to keep an accurate check on progress of the epidemic and the measures in operation for checking it.

#### Coöperation in Disease Control

Effective disease control depends to no little extent upon the coöperation among physicians, health officials, and the school personnel. The purpose and the program of the school should be made known to the practitioners of a community. It is especially important to have the rules for exclusion and readmission understood. Rigid enforcement can only be effected when local physicians uphold the school in its efforts to prevent spread of the disease.

A system of interdepartmental reports is essential. The exchange should be daily, the school officials reporting exclusions and suspects, and the health officials reporting cases in the community.

Similarly, school nurses and community nurses should establish a working basis for exchange of information and, in particular, a procedure for co-operating when an epidemic is threatened.

#### Emergencies at School

It is well to be prepared for emergencies and epidemics. A program of procedure should be carefully planned, put into definite form, printed,

and circularized. Every person in the school system should know his part letter perfect.

The latest telephone directory should be available. In cases where both parents work away from home during the day, it may be of value to know where and how one or both may be reached. The addresses and telephone numbers of several physicians residing nearest to the school, including the school physician, should be typed on a card and placed near the telephone and in sight. The telephone numbers of the nearest taxicab station, of the nearest hospital, and of the nearest garage where an ambulance or other conveyance may be engaged, should also be placed in a conspicuous and permanent place known to all.

## State Health Department

### SPOTTED FEVER

D. C. Bowen, Director of Health  
New Jersey State Department of Health  
Trenton, N. J.

A case of spotted fever has been diagnosed in New Jersey and confirmed by the State Department of Health and the United States Public Health Service. The disease is new for New Jersey and attention of physicians is called to its discovery so that practitioners may be on the lookout for other instances.

The case recently discovered was in a farmer, 32 years old, residing in the vicinity of Fort Mott, Salem County. The infection is transmitted by the bite of a blood-sucking tick, and a definite history was obtained that this farmer had been bitten by a tick. The investigators learned that the victim had not been more than a few miles away from the immediate vicinity of his home, and the authorities were satisfied that the infection occurred locally.

In the onset of this disease the symptoms resemble those of epidemic cerebrospinal meningitis. A few days after onset an eruption appears, most apparent upon the wrists, hands, lower legs, feet and back of the victim. The disease has not been declared reportable to the state authorities in New Jersey, but services of the State Department of Health were sought and an investigation made. The state authorities called in a representative of the United States Public Health Service, and the diagnosis of the disease as spotted fever was confirmed.

The patient was first taken ill May 23 and was moved to a hospital 3 days later. The eruption was first noticed May 27. The case was a relatively mild one although 2 weeks after onset of the illness the patient's hearing was still affected and he was subject to dizziness.

According to the United States Public Health Service, the commonest symptoms at the height of the disease are, in order of frequency, as follows: Prostration; headache, usually frontal; constipation; nausea and vomiting (more frequent in the Rocky Mountain spotted fever type); low backache and leg pains; unproductive cough. In the Rocky Mountain spotted fever type, pain in the back of the neck, and abdominal pains were not uncommon. Sweating was not uncommon. Rare symptoms were epistaxis and dysuria.

## Communications

To the Editor:

The enclosed manuscript is sent you in order that you may know something of what the dental profession is doing in a field in which we believe all branches of the medical profession are interested. The Committee on the Study of Dental Practice agreed that in the proposed investigation of medical insurance to attempt the separation of the dental from the medical phases would be impossible. The interests of the professions concerned are not and cannot be disassociated. Therefore, it is fundamental for the dental profession to realize that whatever happens to the medical profession is, for the dental profession, in the nature of a prediction.

### ARE WE FACING SOCIAL CONTROL OF MEDICAL PRACTICE?

(Signed by the Committee on Study of Dental Practice, H. E. Phillips, D.D.S., Chairman.)

Call it "Sickness" or "Health Insurance" the "Panel System" or "State Medicine", no legislation has so greatly affected so many people as that for the social control of the treatment of disease. No section has been so deeply affected as the different branches of the profession dealing with the treatment of disease. This applies almost equally to physicians, dentists, nurses, and to nearly all the institutions concerned with human ills. These various divisions of the *medical profession* must suffer or profit together from the workings of such legislation. It is impossible to separate their fates, even in discussion, and certainly not in programs of action. To emphasize this solidarity the words *medical profession* are used to include all those so affected.

Since Bismark compelled enactment of the first compulsory social insurance laws in 1883, similar laws have been enacted in practically every European nation, in Japan and several South American countries, and are under favorable consideration in nearly all other countries, including Canada, Australia and South Africa.

The International Labor Conference, which includes every nation belonging to the League of Nations, at its meeting in 1927, adopted an agreement binding all members to introduce *compulsory* sickness insurance as soon as possible. While much is made of the distinction between *compulsory* and *voluntary* systems, there are few of the latter without some compulsory features. The difference in degree is so slight that it is hard to draw the line between them, especially as the voluntary systems are constantly adding compulsory features.

In the United States, workmen's compensation laws have already given us a system of compulsory accident insurance in all but 4 states, while a constantly increasing number of states are extending these laws to cover "occupational diseases". Many features of compulsory insurance treatment have also been included in recent veteran's legislation. All of these measures affect the practice of dentistry.

All forms of insurance tend to expand, to cover new classes, to give more generous compensation, and to extend any service once offered. In Germany this tendency has reached a point where but 5% of the *medical profession* is engaged in

private practice. This percentage is higher in other countries having sickness insurance, but in few does it reach 50%.

This matter falls within the jurisdiction of state legislatures. There are 48 states and it will be a miracle if some of them do not soon make the experiment, especially in time of industrial depression, which always produces social legislation.

Such a change would deeply affect the income, professional standards, methods of work, freedom of practice, all relations with patients and nearly every other feature of the lives of all the physicians and dentists, whether they came directly under the operation of the law or not. There is hot dispute as to the nature of these effects. *Opponents* declare that such legislation degrades the entire healing profession; encourages malingerers; reduces incomes; leads to superficial, stereotyped treatment after hasty diagnosis; introduces lay control of professional matters; and generally demoralizes all relations with the patient. *Advocates* urge that it brings increased income, especially to the beginning practitioner; that it brings medical care within the reach of large masses hitherto excluded; makes early diagnosis universally possible; and leads to general betterment of health conditions.

Part of this disagreement is due to the multitude of insurance systems. These differ, not only as to countries, but every system changes constantly and produces different results at different times. In planning a program in relation to such legislation it is of paramount importance to know whether a certain good or evil result is inherent in the insurance system, or is peculiar to certain times and places. It is also important to know whether the good results can be obtained by other means and, especially, whether—if insurance be pressed upon this country—it is possible for an *organized medical profession* to secure such provisions as will avoid its evils.

It is to obtain the information that will help the *entire medical profession* to meet this possible threat, in such a way as to utilize any action that may result to the best interests of the public and the profession, that the Committee on the Study of Dental Practice of the American Dental Association is conducting a study of all phases of sickness insurance in Europe and America. As fast as the results of that study are available they will be placed before the members of the American Dental Association, and will be available at any time in the future when such legislative proposals are under consideration.

(To be continued.)

### FORTY-NINTH ANNUAL REPORT OF THE SOCIETY FOR THE RELIEF OF THE WIDOWS AND ORPHANS OF MEDICAL MEN OF NEW JERSEY

The Society is in a very healthy condition. We have maintained our membership and have been able to assist a number of widows and orphans who were in need of some financial aid.

The Permanent Fund now amounts to \$47,100.53, and the income from this sum was \$2,382.46. The proceeds of the Permanent Fund, as you know, may be used to give financial aid to the widows and orphans of former members. As in previous years, we have found it difficult to ascertain the names of those who may be in need of our help,



so again we ask our members to communicate with the President or Secretary regarding any widow or orphan who is in need.

At the present time we have 498 members; 35 new members were elected and 5 have resigned. We are sorry to report that we were obliged to drop 17 members because of non-payment of dues.

Your Board of Trustees always endeavors to induce members not to allow themselves to be dropped, because we feel we need them and they need us; not, perhaps, for any financial reward they may receive, but for a far better reason, the privilege of helping others.

During the year we lost by death our faithful Secretary, Dr. Charles D. Bennett. He was one of our earliest members and served for many years as secretary. No one loved the society more, or gave more of his time and thought to its work and welfare. His courtesy, efficiency, and willingness to serve in all capacities, will long be remembered.

We regret to report the loss by death of 13 other members during the year: Drs. W. C. Lieberman, W. S. Washington, G. K. Dickinson, C. A. Limeburner, E. W. Hedges, H. W. Nolte, Jean Wolfs, Daniel McCormick, B. Van D. Hedges, R. Kuehne, J. H. Moore, Paul Fitzgerald and F. C. Demarest.

Dr. Edward J. Ill, on June 12, 1930, delivered an address before the Woman's Auxiliary to the Medical Society of New Jersey, in which he said:

"I am thankful to be able to present some facts which should of necessity interest you. If it is not for your personal benefit, you should be aware how many doctors leave their families in a destitute condition and how our society has been able to relieve much real distress.

The Society for the Relief of Widows and Orphans of Medical Men of New Jersey has been in existence for 40 years. It has 500 members. At the annual meeting on May 14, 1930, the Treasurer reported a Permanent Fund of \$44,930. The income from the fund amounted to \$2316.63. This income may be distributed to such widows and orphans as in the opinion of the trustees is thought wise. The trustees wish to help such as are in need. It is not considered a charity by the trustees but a right to which such widows and orphans are entitled.

I am asking you now to present to me the names of such widows and orphans of members, who are in need, so that the trustees may take such action as they think wise to give some relief. It has been most difficult to get the names of such as are in need. A *false modesty*, or let us call it *pride*, may be at the bottom. *Let us remember that the needy have a right to request aid.*

A few months ago, Dr. Ill mailed a copy of his address to the wife of each medical man in New Jersey. Through this appeal 25 new members were obtained and we have great hopes of receiving more.

Dr. Ill took his valuable time to do this, and also bore the entire expense. Later, when the Board of Trustees met and tried to reimburse him for the expense, his answer in a quiet, gentle way was—"No, it was a labor of love". That is perhaps the best motto for our society: *A labor of love.*

Respectfully submitted by

W. D. Miningham, M.D.,  
Secretary.

## ANOTHER QUESTION OF ETHICS

(A letter received from Dr. Elias J. Marsh, of Paterson, Treasurer of the Medical Society of New Jersey.)

Editor of the Journal: In common, doubtless, with many other of our members, I have received a circular letter from a firm of stock-brokers in Philadelphia, offering to sell me shares in various manufacturing pharmaceutical houses, on the ground that "as a member of the medical profession, you are, no doubt, interested in corporations whose products are extensively used in the practice of medicine". Of course, stock-brokers cannot be expected to be interested in professional ethics, but I should like to know how our Judicial Council, or the editor of your department of Ethics, regards this suggestion. It seems to me intolerable that a physician should have an interest in prescribing a certain article, or drug, when his judgment tells him that another is better for his patient in any given case. No one preparation is the best for all cases, and no one house produces the best preparation of every kind. It is hard enough to control our prejudices or habits in favor of certain articles; we should not increase the difficulty by adding a personal interest.

Signed—E. J. Marsh.

## THE EDITOR'S ANSWER

The Editor replied to the above letter by saying that he, too, had received the stock-broker's offer, and was considering how best to present his own opinion to members of the society; and, saying further, that the letter (reproduced above) would be used in this manner. So, the Editor gladly avails himself of this opportunity to endorse Dr. Marsh's interpretation of our professional ethics, and to add that he would consider acceptance of the stock-broker's proposition—a gross violation of ethics. We hope none of our members will "fall for" such a business temptation.

## AN INTERESTING ITEM OF HISTORY

(Letter received from Dr. Albert S. Tenney, of East Orange.)

To the Editor: One of my patients in West Orange, while exploring the attic of her mother's home, discovered an old copy of the Saturday Evening Post, dated February 13, 1830—a little more than 101 years ago. Perhaps you are aware that this famous periodical was at that time in its 101st year. Curiously, it had not up to that time changed its size or number of pages, of which there were only 4, from Benjamin Franklin's original copy issued in 1729.

On the second page of the found copy is a statement of deaths in "The City and Liberties of Philadelphia" during the year 1829. "Consumption" and "Cholera" headed the list of diseases, with 638 and 257 deaths respectively. There were only 5 deaths from "apoplexy"; but 34 from "drunkenness" and 94 from "Mania-a-potu" (which for our younger readers may be translated into delirium tremens); 280 died of "debility"; 31 of "mortification and gangrene"; and 29 were "found dead". It also lists 67 deaths from "hives", which seems peculiar, and gave other diagnoses which sound strange to our ears.

## Woman's Auxiliary

### PANORAMIC VIEW OF THE WOMAN'S AUXILIARY TO THE A. M. A. IN FOUR ARTICLES

#### No. 4, Western District

Mrs. James F. Percy

As my division in the organization work covers the states of the far West, branching to the middle states only to include Nebraska, this panorama will begin there. We have been enjoined for so many years to "Go West", that it has now become a favorite direction of travel.

Nebraska is always up and doing, and a survey of activities of 1931 shows an extensive distribution of the National Auxiliary Study Envelope on "Communicable Disease Control"; much welfare work, especially providing professional visiting nurses for public schools in various counties and definite organization of county relief work at a great saving to the County Commissioners. Here, indeed, is a far-reaching benefit for the community-at-large in a practical, economic way. Benefits are held to procure funds for completing files of scientific books and magazines and research work of the pathologic laboratory connected with the Sharp Building Library, at Lincoln. The Auxiliaries' scientific educational programs contain many important names, which, together with social and philanthropic activities, keep everyone interested, useful and happy. One new county auxiliary has been reported as a last gift to this administration.

Colorado has kept up the interest aroused during the national presidency of Mrs. F. P. Gengenbach, of Denver, particularly with spreading ideas of good and better health through the use of literature in the less populated districts. Included with this, "study envelopes" have been used, and a greater field developed for approved health programs in other organizations. Growth in numbers has not been sought so much as growth in achievements.

Wyoming must be passed as having been silent to all requests for even a hint as to its status. Geographically, Wyoming and Utah are difficult of organization, but within the few years that lie immediately ahead they are certain to be caught in the vibration already swinging its way throughout the land and we feel sure they cannot long be resistant to its call. Utah has already given expression, through her women visiting other states, that she is ready to take action to further a properly organized auxiliary.

New Mexico, with but 1 county, Bernalillo, organized, and far from all centers of activity, has been an inspiration in her efforts to follow the National precepts. Unless one has traveled the great spaces of the deserts of the southwest, no conception of distances can be formed. This single county has taken up child welfare work, sale of tuberculosis seals, enjoyed programs from its medical men, County Health Nurses and the State Director of Public Health, and carried the social activities of the State Medical Society Convention. It is few in numbers, but verily the heaven quickeneth the whole loaf.

Arizona has trebled its units from 1 to 3, but has found organization work difficult because of distances. Social features have prevailed, unless

some definite need loomed in the offing, such as the Basic Science Bill, for the passage of which the State Auxiliary made great effort. In a state so filled with cults, the passing of that Bill by the Senate was a real achievement, even though it was finally held up in Committee. However, nothing daunted, the members are now aroused to the possibilities and usefulness of an auxiliary, and experienced women are stepping forward, willing to serve and assist in making an active, worth-while organization.

California has been concerned, aside from organization, with establishing itself upon a permanent foundation through a proper Constitution and has been able to do this with the full support of the California Medical Association, which is printing these Constitutions as a gift to the State Auxiliary.

At the recent State Meeting, held in San Francisco, April 27-30, 165 women registered, with 55 delegates and 115 women seated at the annual luncheon. The Auxiliary now feels safely established.

The keynote of each county report was education, but the social side, welfare work, Red Cross, changing the position of a State Senator, creating sentiment for a Tuberculosis Sanatorium, local philanthropies, all had their places with the scientific programs. A chart—"The Technic of Following a Bill Through the Legislature"—provided a most unique, striking and valuable object lesson as to what we are all up against in our legislatures.

A resolution was introduced, adopted, and directed to the National Committee on the "High Cost of Medical Care", asking for a change in the name under which that Committee functions, to one more in accord with the facts it is studying, namely: "The High Cost of Illness or Sickness". The original name implies some fault of the medical profession; while the proposed name is inclusive of all the various factors involved in the problem. A copy has been sent to the National Auxiliary asking endorsement of said resolution at the Philadelphia Convention. The California Medical Association is presenting a similar resolution to the House of Delegates, A. M. A., whose membership now closely approaches 900.

The interest shown and the friendliness in the social life at this Convention demonstrated a new order which we hope has come to stay.

Oregon has chiefly concentrated upon organization work and revival of general interest this year, through providing the units with a list of suggested "study topics" to encourage a similarity of subjects. Portland has monthly meetings with speakers who use the material contained in the "study envelopes" and is extending her educational and philanthropic interests as well. Temporary organization in one county is hoped to soon become permanent, thereby increasing the number and justifying the work of the state officers.

Washington is showing great interest to become organized and after considerable correspondence, it has been deemed best to have the primary action come through the State Medical Meeting which takes place soon after the Philadelphia Convention. We feel it is safe to prophesy that Washington will be on the list of organized states for our successor.

Idaho is listed as an organized state, but as all letters have remained unanswered the panorama must end here.



To those who were fortunate enough to attend the National Meeting at Philadelphia, no further stimulus will be needed.

Each state will be eager to carry out the aims and the ideals of the parent organization.

We learn from those who have achieved, and in Pennsylvania the accomplishments of the Auxiliary, together with the complete plan for the National Convention, will give a wide understanding of a still greater organization and insure a generally more important recognition in the days to come.

## County Society Reports

### ATLANTIC COUNTY

#### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., F.A.C.P., Secretary

The regular monthly meeting of the General Staff, Atlantic City Hospital, was held in the Auditorium June 26.

The scientific program was presented by Dr. John S. Irvin, Director of the Dispensary, who detailed the activities of the dispensary for 1930. Total number of dispensary visits, 35,040.

Dr. A. M. Rechtman, Associate in Orthopedic Surgery, presented some clinical cases.

Dr. E. Harrison Nickman read a paper on "The Problem of Tuberculosis Among Children", as follows:

Within the past decade, the conception of tuberculosis, particularly with regard to children, has undergone a great change and out of it has evolved the belief that tuberculosis is primarily a disease of childhood. Two distinct types of tuberculosis infection are now described—the primary or childhood type, and the reinfective or adult type. Primary infection is more common in the child and reinfection in the adult, but either type may occur in either period of life. Of course, the knowledge that tuberculosis generally originates in childhood has induced special efforts at early diagnosis and treatment to avoid the infections that occur in later life. Diagnosis of tuberculosis in children, by consideration of the history, symptoms and physical signs, is no longer thought possible, but by means of newer procedures much may be accomplished. The tuberculin test and x-rays are indispensable in this work, but even these are not conclusive in themselves. The ultimate diagnosis rests upon correlation of all the evidence, hence the adoption of a routine diagnostic procedure.

Our procedure, modeled upon that employed by the Massachusetts Department of Public Health, and which represents what is now generally recognized as being the most effective and most economic, provides for tuberculin test of all children. One physician can test 200 to 300 children per day, and 48 hours later the reactors are listed. Each reactor is sent to a roentgenologist, and those who show definite findings must undergo a thorough physical examination. A full statement is given to the parents or guardians, with recommendations, and the child is provided with appropriate

treatment. This "case finding procedure" has much to recommend it, and the plan, according to Chadwick, works out approximately as follows: for each 100 children, including high school pupils, given a tuberculin test, 30 will be positive reactors; of these 30, when x-rayed, 5 will show abnormal shadows on the film which will make a physical examination advisable. Careful physical examination is then required for only 5 out of each 100 children.

A word about tuberculin testing, which is the basis of our diagnostic weeding-out process. Many tuberculin tests have been devised and advocated, but only 5 have had any prolonged usage. Koch's original test depends upon the subcutaneous injection of "Old Tuberculin" in dilutions of increasing strength; now used only upon rare occasions because the resultant focal and general reactions are sometimes severe. The Moro test is performed by rubbing an ointment, containing 50% Old Tuberculin, into the skin of the chest or abdomen, and a positive reaction is indicated by a papular area of redness which appears in about 24 hours; a high percentage of positive reactors is claimed by some and it is used extensively in Europe and to some extent in this country. The Calmette test consists in placing a drop of 1% Old Tuberculin directly on the conjunctive, and a positive reaction is indicated by development of conjunctivitis; although great reliability is claimed for this test, its use is hampered by the danger of permanent injury to the eye. One of the earliest, and still the most popular, of the tuberculin tests is that devised by Von Pirquet, which has the advantages of great simplicity and a fair degree of accuracy; it is performed by abrading the skin of the fore-arm and applying 1 drop of concentrated Old Tuberculin, and a papular area of redness appearing in 12-96 hours constitutes a positive reaction.

The test which is now supplanting all others is that suggested by Mantoux and Mendel and which carries the name of the former. This method possesses several advantages. It is simple; can be performed in a standard manner; the dose can be accurately measured; result is easy to interpret; it gives a slightly higher number of reactors than the Pirquet method; it is a rough index of the degree of activity; and is not harmful to the patient.

The Mantoux test, which we use exclusively, is the intradermal injection of Old Tuberculin in measured dilutions; dosage in our clinic is 0.01 mgm., 0.1 mgm., and 1 mgm. Old Tuberculin in 0.1 c.c. of sterile normal salt solution. Reactions appear from 12-72 hours later, the greatest number occurring at about 48 hr., at which time tests are read. If the individual does not react to the weakest dose, he is tested successively with the more concentrated solutions. In this way, reactors are often discovered after being negative at the first reading. An important point to be noted in reading a tuberculin reaction is that the lesion consists of 2 parts, a central area of edema and a surrounding zone of erythema. The redness should be entirely disregarded, as it is believed to be a non-specific phenomenon. In this respect the tuberculin test must be differentiated from the Schick and Dick tests, in which the area of discoloration is of primary significance. In the Mantoux test, the area of edema alone indicates sensitization to the toxin of the tubercle bacilli.

What is the significance of the tuberculin re-

action? It has been pointed out repeatedly that it does not always denote active disease, especially in older individuals, nor do any of the men who now employ it make such a claim. Failure to realize that a *positive test* does not constitute a *diagnosis of activity* is responsible for many clinical errors. A positive result does, however, indicate tuberculous infection, latent, active or healing, and the younger the patient, the greater is the probability of activity.

Intensity of the reaction is of some importance. In general, the more active lesions are attended by more severe response than quiescent lesions. However, it must be admitted that this *seeming relationship* is not universally accepted, for many observers have reported quiescent cases with severe skin reactions, and vice versa.

Prognosis and type of treatment depend upon the extent of the disease and the child's individual response to the disease. Based upon this, we divide our positive cases into 3 groups.

In general, children who react to the tuberculin test but show no roentgenographic evidence, those with circumscribed calcified parenchymal nodules, and those with healed tracheobronchial nodes, need no special attention except periodic examinations at intervals of 6 weeks to 1 year. In this group the prognosis is excellent. The individuals are regarded as healthy, and no restriction is placed upon them.

A second group contains those children who are in danger of tuberculosis that will undermine health and who should receive the preventorium form of treatment. They show first, latent lesions of the childhood type; second, tuberculous tracheobronchial nodes when contact with open tuberculosis is still present, when the tuberculin reaction is intense or when the lesions are very large; third, latent adult tuberculosis; fourth, arrested pulmonary tuberculosis; and fifth, lesions of the first group where impaired health, perhaps not due to tuberculosis, is present. Since February, 3 patients from this group have been sent to the preventorium at Farningdale, and several others have been referred for admission.

The third group contains those children who should receive sanatorium treatment, those who show both x-ray and physical signs, who show progressive lesions on repeated x-ray examinations, or who have massive uncalcified tracheobronchial lymph-node involvement. Three children of this group, with moderate activity, have been sent to Glen Gardner and 1 advanced case to Pine Rest.

If children of the preventorium and sanatorium groups receive proper care, they are usually able to successfully combat the disease. However, they sometimes succumb to an excessive infection due to the breaking down of supposedly walled-off tracheobronchial nodes. The presence of such nodes should always be regarded as a potential source of danger until the period of early adult life is established.

I believe that tuberculosis will eventually be treated as a public health problem. Like diphtheria and small-pox, it should be added to the list of diseases that can be attacked with advantage in the schools, and every child, whether or not suspected of harboring the disease, should be examined for tuberculosis by some method similar to the one described.

Discussion followed by Drs. Fish, Salasin, Marvel, Rosenblatt, Andrews and Marcus.

## CUMBERLAND COUNTY

E. S. Corson, M.D., Reporter

Dr. Reba Lloyd, President of the Society, opened the hospitable doors of her suburban Sanatorium, Ivy Manor, to receive as guests the members of the County Medical Society together with several visitors from Salem and Gloucester Counties.

An interesting report was given of the progress of plans for the inter-county Tuberculosis Hospital. The selection of a central and suitable site seems to be the main point to be settled.

Dr. Robert Sturr discussed the new diagnostic features of gall-bladder and gastro-intestinal tract disease. Discovery and use of newer dyes has made possible the demonstration of every form of gall-stones, and the need of surgical exploration, for determination of the character of most diseases of this part of the body has practically been eliminated.

Dr. Graham brought out the accurate use of dyes by the intravenous method, as they are not then diluted by the gastric juices. Nonfilling gall-bladder is pathologic. Stone in the common duct is less easy of detection. Gall-bladder function test is important, and adhesions and surrounding fat change its features. Cardiospasm of the pylorus may be differentiated from ulcer by use of belladonna. Ulcers of the duodenum are never malignant. Those of the stomach are usually of the small penetrating type. Intestinal obstruction is indicated by the step-ladder appearance.

Dr. John H. Kolmer, who endears himself to every audience by his personality and masterly delivery of his subject, spoke on "Infection of the Blood Stream".

## UNION COUNTY

Russell A. Shirrefs, M.D., Reporter

A regular meeting of the Union County Medical Society was held on the afternoon of July 8, at Bonnie Burn Sanatorium, Scotch Plains, with President Vinciguerra in the chair. It was a pleasure to have with us as distinguished guests, Drs. John Hagerty, President; J. B. Morrison, Secretary, and C. C. Beling, Councilor, of the State Medical Society; each of whom spoke and interestingly outlined the work of his respective department.

On account of the heat, routine business was reduced to a minimum. Dr. John E. Runnells, Superintendent of Bonnie Burn, addressed us on the subject of "Tuberculosis", with especial reference to compression of the lung in suitable cases. His talk was illustrated by many x-ray pictures. At the close of the meeting a "shore" dinner was served in a nearby grove.

## Obituaries

KOCH, Louis A., life-long resident of Newark, and since 1902 a Newark physician specializing in dermatology, died July 7, 1931, at the home of his brothers, William and Paul Koch, 44 Johnson Avenue. He was 53 years old.

Dr. Koch had been ill many months. He was on the staff of the Newark City Hospital and head of the Dermatology Department of the Newark Dispensary.

Dr. Koch was graduated from the medical school of the University of Maryland. Besides being a member of the Newark Lodge of Elks, he belonged to many medical societies.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 9 ORANGE, N. J., SEPTEMBER, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## PLASTIC SURGERY; INDICATIONS AND RELATIONSHIP TO OTHER SPECIALTIES

JACQUES W. MALINIAK, M.D.,  
New York City

Plastic surgery receives equal recognition with the other special services in every modern hospital because of the numerous conditions requiring plastic repair and in the interest of advancement of this relatively new specialty. Only within comparatively recent times have medical colleges and general hospitals established services for plastic surgery, and there is a lack of uniformity in its status in the general hospitals; some having organized it as an independent service, and others having combined it with the departments of oral surgery or of rhinolaryngology. The necessity of this special service is not as yet realized by all medical boards, so there is need for further enlightenment.

### PREVENTIVE MEASURES IN INJURIES OF SOFT TISSUES

The United States Bureau of Statistics reported more than 1,000,000 injuries and 52,000 deaths due to automobile accidents alone in the year 1929. A toll of approximately 10,000,000 accidents of all kinds in this country during the past year is reported by the Metropolitan Life Insurance Company; and, at the present rate, 100,000 automobile casualties are estimated for 1931. Most of the injuries incurred in such accidents require medi-

cal and surgical attention. Thorough emergency repair of soft tissue injuries would be of much avail in the prevention of conspicuous deformities, in the preservation of function, and in the reduction of economic waste.

Hematoma, infection and inaccurate adjustment of tissues tend to result in a prolonged healing process, with undue scar formation and disturbance of function. The healing process of a properly treated wound requires only a few weeks, but may be protracted to months or years in the event of inadequate first aid treatment, and thus cause unnecessary suffering and economic loss.

The vast number of highway and industrial accidents in this country demands the establishment of appropriate treatment facilities in general hospitals. Emergency surgery, required in extensive lacerations of soft tissues, particularly those about the face and neck, should not be left to the judgment of an intern, as is so often the case in general hospitals, but should be supervised by a competent plastic surgeon. If the accident occurred several hours before the injured person was brought to the hospital, and under unfavorable aseptic conditions, immediate disinfection of the wound by moist warm dressings and liberal use of Dakin's solution, is the safe procedure, postponing surgical repair for 24-48 hr., when a culture from the wound may prove negative. Far more satisfactory end-results are obtained by the later repair of soft tissues in a properly equipped operating room, without haste and undue tension, than by immediate repair in the emergency room.

## SURGERY OF SOFT TISSUE DEFECTS

Burns and motor accidents cause the largest group of disfigurements, the end-results of which may affect function of the involved part, as well as the vocational and social status of the individual. Proper management of burns requires the most painstaking and elaborate reconstructive procedures in order to secure satisfactory cosmetic and functional results. Exposed nerves, tendons and joints must be adequately protected by adjoining

area as nearly as possible. A pedicled skin flap may not be available, but even when it is, conspicuous scarring may result. Repair of a skin defect by repeated, partial excisions is the method of choice, and should be applied whenever possible.

Successful reconstruction of large defects following cancer surgery, especially in the maxillofacial area, encourages a more thorough eradication of the disease and promotes the chances of cure.



A.

Figure 1. (A) Nullipara, aged 22, with conspicuous pendulous breasts; patient suffered from pain around the shoulders and chest. Marked kyphosis and faulty posture; marked mental depression.



B.

(B) Same patient 3 weeks after operation which consisted in subcutaneous transposition of gland with nipple, resection of fat tissue and mastopexy to the pectoral fascia. The principal scars placed in the submammary fold and around the nipple are barely noticeable a few months after operation.

pedicled flaps or by free full-thickness grafts. When the involved part does not interfere with an important function, a thick Thiersch graft will furnish a satisfactory covering. Full-thickness grafts often "take" on the forehead but usually will not on the cheek or neck, because complete immobilization of the region is difficult. Thin skin grafts have a pronounced tendency to contract and, consequently, should not be used in treating wounds around the facial cavities and neck. In burns and other extensive wounds of the face, repair is to be done by use of a skin graft which in texture and color matches the surrounding

INDICATIONS FOR PLASTIC REPAIR OF  
PENDULOUS BREASTS

Until recently, reconstructive surgery of pendulous, hypertrophic and atrophic breasts has been largely neglected, particularly in this country. A review of the literature of the past 2 decades reveals a great interest in the subject by leading European surgeons. Surgical procedures for relief of this condition have been described by recognized authorities, and the best method for correction of hypertrophic and atrophic prolapsed breasts is the subcu-



taneous transposition of the gland with mastopexy. (Fig. 1.)

# INDICATIONS FOR PLASTIC REPAIR AROUND FACIAL CAVITIES

*Nose.* For successful performance of rhinoplasties, training in general surgery as well as in rhinology, and a sense of proportion and harmony, are essential. As the rhinologist does not always possess these qualifications, and, moreover, as aseptic facilities are often lacking in a nose and throat operating

atresias, and in other nasal impairments. Correction of congenital or acquired nasal deformities, performed with proper skill and under strict asepsis, should be uniformly followed by satisfactory functional and cosmetic end-results. (Fig. 2.)

*Ear.* Indications for otoplasties and for closure of large defects following mastoidec-  
tomies are of less frequent occurrence than for other forms of facial repair. While partial plastic repair of the ear is accomplished with comparative ease, from the standpoint of end-



A.

Figure 2. (A) Female, aged 20, with conspicuous depressed type of congenital nasal deformity and double epicanthus, causing a Chinese facial expression. Patient suffered from a marked mental depression.



B.

(B) Correction of deformity by a thick rib cartilage transplant which corrected the nasal depression as well as the epicanthus.

room, association of plastic surgery with the rhinolaryngologic service in a general hospital is not a satisfactory provision. The need for partial and total nasal reconstruction can be fully appreciated only by those who deal with patients requiring such repair.

In addition to corrective partial and total rhinoplasties, reconstructive surgery is indicated in atrophic rhinitis, in narrowing of the nasal cavities by transplantation of cartilage into the septum and floor of the nose, in

results there is need for improvement in total reconstruction.

*Orbit.* Surgery of congenital and acquired deformities around the orbit is of vital importance as its purpose usually is not only to correct the disfigurement but, especially, to re-establish the disturbed function. The majority of ophthalmologists do not perform plastic operations in the orbital region, but some of them show great skill in such corrective surgery and have contributed much to its development. The most frequent indications for

plastic repair in this region grow out of cicatricial contractions around the eyelid and eye-socket due to accidental injuries.

The shifting of skin flaps from the adjoining area, and the use of free skin grafts, encounter far greater difficulties in the orbital region than elsewhere, because of the varieties of skin-covering required and the functional significance of the eyelids. To obtain satisfactory anatomic and physiologic restoration in this area, a *thick* skin graft must be used for the forehead, *hair-bearing skin* for the eyebrow, and a graft of *fine texture* for the eyelids.

from 4 to 5 weeks after birth, and the palate should be closed at the age of 12 to 18 months. To assure good functional results, the children should receive early and competent speech training.

*Skin Malformation.* A nevus hemangioma, lymphangioma, fibroid, hairy mole, or an area of pigmented skin may be eradicated by repeated excisions, without leaving a trace of the surgical intervention except a linear scar. If shifting of an adjoining skin area cannot be accomplished, free or pedicled skin grafts can be used. If indicated, plastic surgery may be supplemented by the application of x-rays



A.

Figure 4. (A) Right unilateral incomplete cleft lip with flattening of the nostril.



B.

(B) Condition 6 months after cleft lip repair, done at the age of 6 weeks.

*Cleft Lip and Cleft Palate.* From the functional and cosmetic points of view, too frequently the end-results in operations performed for cleft lip and cleft palate leave much to be desired, despite the surgical progress made during the past 2 decades. The technic available for repair of a cleft lip deformity is today of such precision that further failures should not occur. In the more complicated types, the operation should be done in successive stages. The factors necessary for successful end-results are: proper outlining of flaps provided with adequate blood supply; sufficient undermining of the surrounding skin and mucous membrane; avoidance of tension; and the use of fine suture material. (Fig. 4.)

The operation for cleft lip should be done

or radium. Although in these skin affections radiation alone sometimes results in partial improvement, this therapeutic measure is frequently misused. Prolonged irradiation is always followed by scarred skin, which contrasts conspicuously with the surrounding area. Moreover, the prolonged treatment of skin blemishes by radiation exclusively is a great economic waste, causes the patient much mental distress and rarely completely eradicates the deformity.

#### SUMMARY

- (1) Plastic surgery has become an indispensable surgical unit in the general hospital.
- (2) Inclusion of plastic surgery in other



departments of general hospitals is inadvisable.

(3) The many problems involved in the



A.

Figure 6. (A) Partial loss of nose resulting from galvanocauterization of rhinophyma.

plastic surgery and should be undertaken only by a qualified specialist.

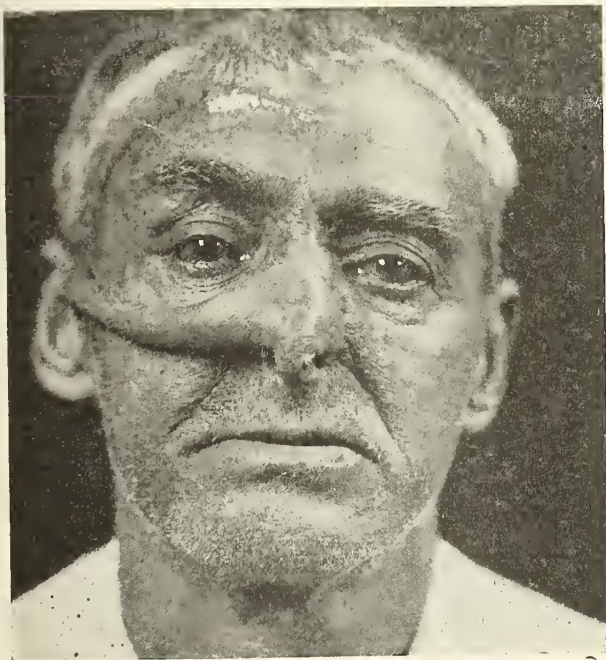
(4) The successful reconstruction of highly hypertrophic and atrophic prolapsed breasts is assured by the method of subcutaneous transposition of the gland.

(5) The end-results in rhinoplasties are uniformly successful if the surgical procedure is carried out aseptically and with proper skill.

(6) Intricacies involved in the plastic repair of the orbital region are due to the different types of skin grafts required in a relatively limited area and to the functional importance of the eyelids.

(7) Cleft lip and cleft palate, if repaired at an early age, should be followed by satisfactory end-results in the majority of cases.

(8) A variety of skin affections can be



B.

(B) Delayed tubed temporal flap, the distal end of which is sutured into the nasal defect and sutured to the flap; the lining of the nose was provided by the nasal skin from above the defect, rotated downwards.



C.

(C) Final reconstruction of the nose after returning the pedicle to the temporal region and excision of the forehead scar\*.

\*Maliniak, J. W.: Rhinophyma—Its Treatment and Complications. Archives of Otolaryngology. Feb. 1931, Vol. 13, pp. 270-274.

prevention and correction of deformities from soft tissue wounds caused by burns and motor accidents require a thorough knowledge of

successfully treated, and with the avoidance of great economic loss, by plastic procedures followed, when necessary, by radiation.

## SOME DIFFICULTIES OF THE ASTHMA PROBLEM\*

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Much is known about hay-fever. Comparatively little is known about asthma. Of its etiology, its pathogenesis, the mechanism of its crises—some brief, others severe and prolonged into weeks and months, even lethal—of its therapy, little of a conclusive sort is known. And yet, 10 years ago, with the therapeutic solution of hay-fever in the hands of the profession, hope ran high that solution of the asthma problem also was at hand. Today it seems as distant as ever.

Hay-fever and asthma are so commonly conjoined in the professional mind, that the mention of one usually evokes the idea of the other: wherefore, it may be well to mention briefly some of their similarities and contrasting features.

Hay-fever is an allergic manifestation. Supposedly so is asthma—sometimes. Seasonal incidence is the striking characteristic of hay-fever; as an attribute of asthma it is only occasional. Hay-fever is marked by turgescence and watery discharge from the mucous membrane of the upper respiratory tract, with eosinophiles present in the discharge and in the blood stream. It is supposed that asthma presents a similar picture in the bronchial mucosa. Hay-fever paroxysms may be temporarily relieved by adrenalin. Some asthmatic crises are similarly affected. Hay-fever is caused largely by sensitivity to pollens. Certain cases of asthma have the same apparent background. Treatment by pollen solutions improves a great number of cases of hay-fever. It helps a few cases of asthma.

On the other hand, a considerable number of asthmatics have their first attack as the result of a respiratory infection; and no matter what the origin of asthma, there is prac-

tically always, after the lapse of time, an infective element present, which apparently may come to overshadow all else. Some asthmatics display a pollen sensitization without ever having had hay-fever. Some have hay-fever first and then develop asthma. Others, asthmatic from the beginning, display no skin reactions whatever suggestive of an allergic condition. Practically all, sooner or later, show evidence of bronchial tract infection, and it is this fact which makes therapy by bacterial vaccines of distinct though limited value.

*Clinical Description.* The usual clinical history and course of the cases which yield more or less satisfactorily to treatment may be described as follows: In the history there may be shown a familial allergic tendency—asthma, hay-fever, eczema, etc. The patient has had asthma for a varying time from a few months to 20 years. It may have been preceded by hay-fever, and the first asthmatic attack may have come in the hay-fever season while symptoms were at their height. On the other hand, no family history of allergy may be obtained, and the patient has never had hay-fever. The first asthmatic attack developed during a severe cold, and every succeeding attack has apparently been the result of what began as a so-called "cold".

The paroxysms in one case may be brief and easily controlled by adrenalin, their nocturnal recurrences continuing only a week or two. In another the paroxysms are febrile, and may be prolonged into a distressing picture of constant dyspnea day and night, relieved only when the patient's vital force seems so depleted as no longer to be able to endure the strain. Utter exhaustion brings a brief respite of 2 or 3 hours sleep, from which the patient wakes at first refreshed, only to begin another paroxysm which goes on to renewed exhaustion. The picture is one of a true status asthmaticus which may last weeks or even months, entailing an amount of suffering which seems unendurable. Such severe status conditions come once or twice a year with only comparative comfort in the intermissions; for these patients are definite chronic fatigue in-

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\* (Read before the Morris County Medical Society, March 12, 1931, as part of a symposium on asthma.)



valids and incapable at their best of the effort of healthy individuals.

The cases with brief paroxysms, and in general of the mild type, are apt to obtain prompt relief of the paroxysm with 1 or 2 hypodermics of adrenalin. The discovery of a pollen or other sensitization and the administration of appropriate treatment may prove very efficacious. In other cases where an infective element was evident from the start, or where it has crept in after several years of successive attacks, the culture of sputum, of sinus washings, or of tonsils, yields a growth from which a vaccine may be developed whose efficacy in improving the patient's condition is more or less gratifying.

The discouraging feature of most of these cases is that the attacks, despite temporary relief by treatment, keep recurring, and the patient and physician must be always on the alert for the first evidence of trouble as the signal for renewing treatment. Curing the crises or attacks has not cured the disease; and, as has been suggested above, the patient all too often is still, between attacks, an individual much below the normal standards of health.

It seems evident then that direct attack upon the asthmatic crisis is only a partial measure; and this leads to an inquiry into the pathology of asthma, and to a consideration of some of the questions which arise out of any effort to solve the asthma problem.

*Pathology.* Death from uncomplicated asthma is comparatively infrequent. Rackemann, in his monograph just published, has collected only 12 reported autopsies—3 of them among his own series. These reports reveal 2 types of lesion. The one shows an hypertrophy of the smooth muscle of the smaller bronchi; the other, hypertrophy of the mucous membrane and mucous glands. Both types are apt to be found in the same subject, but one or the other may be distinctly dominant. Emphysema is an almost constant finding in every case, and eosinophiles are scattered through the mucous membrane. The cases with muscular hypertrophy as the main lesion are supposedly those whose crises were due to bronchospasm and were most susceptible to the influence of

adrenalin, and they represent essentially the type of asthma due to some outside agent; while those with an hypertrophied mucous membrane are the ones less amenable to adrenalin, and belong more often to the group associated with bacterial infection. While this statement is in the main true of the 2 types where they can be readily distinguished, it must be understood that admixture of the types is common and a dividing line may be hard to define.

Study of our own cases, based on roentgenograms and physical findings, indicates that chronic bronchitis, pleurisy, particularly at the bases, and bronchiectasis should be included in the pathology of asthma. Bronchiectasis is not uncommon, and is of importance because it may easily constitute a focus of infection of no inconsiderable proportions.

This local condition of hypertrophy of the bronchial musculature and mucosa is apparently the important factor in the asthmatic crises. Just what is back of it is another matter. Hypertrophy is perhaps merely the local response to repeated attacks, just as emphysema is another pathologic feature which develops from constant renewal of attacks in the course of time.

In those cases chiefly marked by bronchospasm and without much chronic thickening of the bronchial mucosa, adrenalin may give prompt and marked relief. This apparently is to be regarded as evidence that sympathetic depression or vagus irritability is the cause of the bronchospasm, for adrenalin is known to be a powerful sympathetic accelerator. It is possible that whatever disturbs the vagus-sympathetic balance may be a potential factor for production of the asthmatic attacks, and causes for such disturbance are probably numerous. Hypersensitiveness to antigens, pollen or bacteria is only one factor, albeit the one best known, and, to date, most important in this connection.

*Irregular clinical types.* Properly speaking, asthma is a symptom, not the disease entity in itself. We should not confine ourselves to treating asthma; we should treat the patient who suffers from asthma; just as we treat the patient who suffers from indigestion, and

search for ulcer, cholecystitis, cardiac incompetence, or other cause. The cases with hypersensitiveness to antigens have been outlined. But other and confusing elements, apparently outside the range of what is known as allergy, creep into view. This leads to a consideration of what may be called irregular types of asthma; i.e. those cases which show some element or elements beside allergic or bacterial activity; and such are all too frequent.

In a given case, let us say a timothy sensitization is discovered and appropriate treatment does much to ameliorate the attacks. However, they persist, and then a bacterial vaccine is employed which for a time works wonders. Nevertheless, there is an annoying residue and tendency to paroxysms which will not down until a weakened heart muscle is recognized and braced up with digitalis, or an hypertension has been relieved by prolonged rest in bed and simple diet. Then only, and thereafter only at the price of constant care of the circulatory apparatus, does the asthmatic phase really recede into the background, though it never completely disappears.

Another case yields unsatisfactorily to the usual methods of treatment, until a laparotomy becomes necessary for fibroid, ovarian cyst, or some gastro-intestinal lesion, when the asthmatic condition is promptly relieved.

Certain methods of treatment must be noted as revealing further vagaries of the problem. The mechanism of 2 of these is essentially similar, viz.: (1) Relief by diet which is really a starvation process; and (2) relief by the exhibition of nitrohydrochloric acid as reported by Beckman, in the Jour. A. M. A., for November 22, 1930. The asthmatic patient supposedly develops an alkalosis, and starvation on the one hand, or the addition of some acid body to the food intake on the other, brings about a diminished alkaline reserve with a concomitant relief of the asthmatic condition.

Treatment of asthmatic attacks with acetylsalicylate and with whisky has met with more or less success in times past, and their utility is impossible of explanation on the basis of anything we know at present about allergy or infection.

A more striking method of therapy is re-

ported by Knott, Oriel and Witts, in Guy's Hospital Reports for October, 1930. They give the report for the Asthma Clinic for the years 1928-30, which embraces a study of 205 cases. Curiously enough, from our standpoint at least, little or no effort was made in this series to employ antigens, pollen, bacterial or other, nor is that side of the problem much stressed.

Their sole treatment was an ounce of glucose in water, with lemon or orange juice, given on an empty stomach twice daily.

Their figures are:

Under 9 yr. of age	22 of 26,	cured or improved
10-19 yr. of age	23 of 31,	cured or improved
20-29 yr. of age	9 of 18,	cured or improved
30-49 yr. of age	6 of 22,	cured or improved

The added infective element with increasing age is held to be the factor lowering the incidence of relief. They attribute this relief to the fact that the liver plays a large part in antigen-antibody reactions, and that it functions best when supplied with glucose. Thus are added still other factors making for confusion in the present current ideas of the pathogenesis of this condition. Environmental and climatic conditions have an important rôle. One patient finds relief at sea, another in the mountains, another in the plateau country of the Southwest, or in the dry sea-level air of lower Egypt. These are not necessarily pure pollen or bacterial cases. Some factor in climate other than the absence of pollen or dust which has an influence on the human organism is probably in play. Perhaps the ultraviolet sun rays have a part in these cures. Perhaps some stimulating effect on the thyroid or other endocrine glands is a potent influence. Many asthmatics, as indeed many patients with chronic infection, are distinctly hypothyroid. Others are too evidently susceptible to emotional influences, and relief from business worry, from the strain and irritations of ill adjusted domestic environment, is a curative measure which should not be neglected wherever possible to accomplish it. Emotion, together with physical and mental overstrain, are recognized factors in upsetting the nervous mechanism, exhausting the endocrines, and disturbing the vagus-sympathetic balance.

And finally, it must be noted that a long



recognized peculiarity of asthma is its quiescence during pneumonia or other severe infections, as well as its tendency to be minimized, if not altogether absent, during pregnancy. What is this common dominator which places pregnancy and pneumonia side by side as incompatibles of asthma? No satisfactory answer to this question has as yet been given; though Beckman endeavors to explain both phenomena by his alkalosis theory.

Every case of asthma needs careful and prolonged study. It can rarely be solved in one sitting. Complete understanding of the individual case is an ideal rarely attained, and observation for months, and through a varied assortment of conditions, is usually needed for any understanding whatever.

It is perhaps not too much outside the bounds of probability to summarize the situation as to this subject as follows:

The allergic mechanism in its essence is to be regarded as a normal part of the physiology of every individual. It is not unlikely that it is an important part of the protective mechanism. In certain individuals there is a constitutional or hereditary disposition to over-react in this respect, so that we come to recognize and speak of an *allergic type*. This abnormal sensitiveness to stimuli which may produce allergic reactions is probably the fundamental factor in asthma; but, as has been pointed out, such stimuli are numerous, and so far as our present knowledge goes, apparently quite dissimilar. We have nitrogenous bodies on the one hand, such as pollen, dust, animal emanations, and bacterial products, which seem to be direct in their action; and on the other such vague conditions as climatologic influence, emotional states, endocrine disturbances, maladjustment of the acid base balance, and factors causing disorientation of the vagus-sympathetic mechanism. The picture is still inchoate, and has great need for synthesis and coördination.

If this has seemed a discouraging or pessimistic presentation, it is a warning against over-confidence and too optimistic prognosis, both of which weaken investigative curiosity. The mind must be kept open and ready for suggestions no matter how bizarre they may seem at first sight. Ignorance of the subject

is so great that there should be no astonishment or disbelief when one investigator reports cases cured by nitrohydrochloric acid, or another reports cure or improvement following laparotomy. We accept with little question the vagaries of the beneficial effect from change of climate, yet who can say what may be the mechanism of the improvement thus brought about?

The present methods of attack are largely based on the removal of focal infections, the use of bacterial vaccines, of pollen or other antigens, and change of climate and environment. But these methods are all too inadequate; and the reasons for that inadequacy, like the Holy Grail, are still to seek.

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## THE DUST FACTOR AND THE BACTERIAL FACTOR IN ASTHMA\*

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The importance of dividing asthma into 2 main groups lies in the different kind of treatment to be attempted. It is our view that a majority of cases of asthma give evidence of bacterial infection of the respiratory system. This is usually in addition to allergic hypersensitiveness to outside dust factors, such as pollens, powders, house dust, and animal epidermal substances. We are familiar enough with the cases which are described in the literature, cases of asthma found to be clinically hypersensitive to horse dander, cat hair, feathers, or orris root used in face powder. The outside factor is removed, and the patient's symptom disappears. In everyday experience cases of this kind are not common. We find the cause difficult to discover, and the symptom apt to continue. It is plain that the practical application of the methods of finding and removing the outside causes is in these every-day cases difficult and tedious. The patient does not recognize any outside factor as causing his symptom, or if

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\* (Read before the Morris County Medical Society, March 12, 1931, as part of a symposium on asthma.)

he does, and the skin test is positive, removal of the supposedly offending substance does not produce the desired result. The obstacles, as we see them, are mainly 2: the difficulty caused by the multitude of causes, and that caused by the presence of infection. They are to be attacked by different methods.

*Multiple outside factors.* The allergic diathesis, or whatever constitutional predisposition we assume for the clinical forms of allergy, such as asthma, does lead to the development of hypersensitiveness to more than 1 outside cause in many cases. We should remember that probably about 500 different substances, mainly from the animal and vegetable kingdoms, can be listed as outside causes of the various clinical forms of allergy. The allergic individual is exposed to many possible exciting causes, and chance would seem in favor of development of the allergic response to several. Although the common causes of hypersensitiveness are relatively few compared with the total, there are supposedly many still undiscovered, as each year's addition to the list would show. We may group them practically under such convenient heads as household dust substances, industrial dust substances, outdoor dust substances (such as pollen), meaning by dust any small particle of material that will float in the air. Inorganic dust is of secondary importance, as it does not, so far as we know, produce an allergic response, though it may aggravate it.

On account of this multiplicity of exciting causes complicating the problem of diagnosis, the attempt to find the specific exciting cause or causes suffers by comparison with any method which would be applicable to all cases.

*Status of drug therapy.* Of such means we first have the ability to cut short the asthmatic response by drug action. With all the various possible outside factors which may be the exciting cause, the asthmatic attack varies little in its essential features, though the time, and place, and other circumstances which bring it on vary a great deal. The attack usually responds to the proper drug, in this case adrenalin, or epinephrin, with a prompt and satisfactory relief of the symptom, in spite of the various causative factors which

are at work. This relief is practically always temporary, and continued use of the drug often leads to an undesired diminution in the response which further limits the result of its use. But this drug is a reliable aid.

Another drug with much the same effect, used widely in at least 1 patent medicine, and usually without a doctor's advice, is cocain, in weak solution. Carried in a spray by many patients, it cuts short the attack and enables them to do work which would otherwise be impossible.

*Use of patient's own household dust in diagnosis and treatment.* Although these aids are in wide use, the first aim of those who are trying to control and prevent asthmatic attacks is of course to find the specific outside factor or exciting cause, if this is possible. This at present is our best chance of effecting permanent relief, and should be considered first. If the skin tests and history are both negative in regard to specific cases (and it is not usually practicable to try more than 20 or 30 at a sitting, or less in the case of a child), it is advisable to test the patient with his own household dust. The dust is obtained, preferably from a vacuum cleaner used in the patient's own room and the parts of the house frequented by him. Sweeping is inferior because of coarse dust collected. The finer portion of the sample is taken. According to the method of Cooke and Coca, after this collection and separation, the finer dust is extracted, after removal of grease by means of ether. The extracting fluid is prepared according to Coca's formula, by adding a small amount of sodium bicarbonate to 0.5% saline, the extraction being continued for 48 hours under toluene. The extract is then drawn through a filter of the Berkfeld type and cultured to test for the absence of aerobic and anaerobic bacteria. Heat sterilization cannot be used on account of the destruction by heat of the substances extracted. About 0.05 c.c., or less, if a strong extract is in use, is injected into the skin of the patient's arm, forming a small wheal. If the reaction is positive, as judged by the growth in size, or definite irregularity of the wheal, with redness of the surrounding skin, there are 2 plans of action



to be pursued: First, is the removal of as much dust as possible from the household by means of frequent vacuum cleaning, the avoidance of large areas of carpet, upholstery, and hangings and the use of waxed wood or linoleum floors wherever possible. The problem of the contents of the patient's mattress and pillow must be attacked in a similar manner, or they must be changed to other substances such as Kapok, cotton floss, or silk floss, depending on the substances to which the patient is sensitive. Much can be done along these lines, but it is usually best, when possible, to attempt reducing the patient's hypersensitiveness, if this is present, by injections of the extract. The dosage must depend entirely on the degree of hypersensitiveness of the patient. Since some patients are very sensitive, it is sometimes necessary to dilute the dust extract before attempting treatment. In general, doses which cause anything more than a slight local reaction should be avoided, the amount being gradually increased and the treatment continued over a long period of time, months at least. It is undesirable to use a dose which produces an allergic reaction such as a marked aggravation of the symptom, or local or general hives. Some of the best results seen are in patients who have taken the dust extract in gradually increasing doses for a year or more. Usually not more than 0.7 or 0.8 c.c. is given in 1 injection because of the larger local reactions caused by the larger amounts injected.

This outline of procedure is described as a general measure of diagnosis where we suspect hypersensitiveness to an outside factor, which may be in the house. If we are able to obtain a definitely positive skin test to some specific substance, such as horse dander or cat hair, the procedure is simpler, and it is just in these cases that the dramatic results may occur. We find, however, that all cases which give a definite skin reaction to one specific outside factor, such as horse dander, do not lose their symptom after treatment with the extract of this substance. Some of them continue with the same symptoms and the same periodicity as before treatment. These are cases which should, of course, be investigated

as to other causes, as completely as possible. The test to the dust of the patient's house is a distinct help.

*Characteristics of hypersensitiveness to outside factors.* In looking over some of the cases of asthma which we have seen, we are first struck by the comparative rarity of the dramatic kind of case that we would like to have; the case where finding and removing an outside cause is followed by disappearance of the symptom. This type of case may be called the true or uncomplicated allergic type, where the outside factor is the exciting cause. We feel that it is characterized by a positive family history; relatively early onset; definite relation between the symptom and some outside factor, resulting in a realization on the part of the patient of certain circumstances of time or place which are associated with his attacks; the presence of some other form of clinical allergy such as hay-fever, or eczema during early life, or possibly hives; the demonstration of positive skin tests to an outside factor, and the presence usually of a high degree of eosinophilia in blood or sputum or both.

Beside these 6 primary factors we may note for this rare type of case the usual aggravation of symptoms by the summer season and the absence of definite evidences of infection. When we see a case with all or even most of these features, we feel that we have one of the true uncomplicated allergic types, in which an outside factor or factors are probably the true and only exciting cause. If the skin tests happen to be negative in such a case, we are likely to think that we have failed to test with the right substance. In such a case we will continue tests and treatment until we have either located the cause or have tried all the possibilities within our grasp.

*Characteristics of hypersensitiveness to the bacterial factor.* It is more common that the case in question shows some of the features above described, but also some of those about to be listed: relatively late onset; or an onset with immediately preceding infection; no definite relation observable in the history between symptoms and an outside dust factor; no positive skin tests; the presence of poly-

morphonuclear neutrophils, together with the eosinophile cells in the spirals and perles of the washed sputum. This type frequently is worse in winter and shows evidence of infection of the respiratory tract on physical and roentgen ray examination. In addition, the sputum more often shows a nearly pure culture of one organism, which is not, however, usually constant.

If the case in question shows practically all these features, we consider the bacterial factor as probably the important element, at least the effective exciting cause. It is of course difficult to exclude an underlying allergic factor. It is more usual, however, to find a mixture of both types. Whether the injury caused by the outside factors, such as the various specific exciting causes, renders the mucous membranes more susceptible to infection than the normal, or whether a common predisposing factor leads to both types of injury, bacterial and nonbacterial, the importance to us of this frequent mixed type of case is obvious. We must attempt to control or at least counteract the effect of the bacteria within as well as the external dust.

*Evidence of bacterial infection in asthma.* To counteract such infection, we first need an understanding of what it is and how it works. From such information as can be obtained from histories, bronchial infection is connected with the onset in many cases. We may neglect the very frequent finding of "subject to colds" as vague and misleading, on account of the marked resemblance between the symptoms of hay-fever and the first days of the common cold—a resemblance which possibly may be worked both ways by speculating on the rôle of allergy in the cold—but we cannot pass over the impressive number of histories which assert that the first symptom followed influenza, grippe, bronchitis, or whooping-cough, as well as the many cases which report a preceding pneumonia not necessarily directly connected with the onset.

On physical examination many cases of more than a few years' standing do show evidence of focal infection of teeth, sinuses or tonsils, as well as the chest changes known as chronic pulmonary emphysema. From x-ray

evidence a great majority show bronchitis, and especially of the basal type often suggesting mild bronchiectasis, and a good many show signs of pleurisy more often at the bases. The sputum commonly corroborates the other findings by showing in a majority of our cases of asthma more or less admixture of polymorphonuclear cells with the eosinophiles which make up the spirals and perles of Laennec supposedly formed in the finer bronchioles. Likewise, sputum culture, though less striking evidence, frequently yields a nearly pure culture of one organism, such as a streptococcus of the green type, or one of the mildly hemolytic type, a pneumococcus, influenza bacillus, hemolytic staphylococcus, or a bacillus of the Friedlander group. When a culture taken in the way to be described shows a predominance of *Micrococcus catarrhalis*, with a few green streptococci or diphtheroid bacilli, the picture does not necessarily suggest an active bacterial cause at work in the bronchial tree. Naturally, cases in which the same organism is repeatedly found, and constantly, are not common, but they are found, and we feel very definite about them, especially when apparently the same organism is isolated over a period of years.

Whatever is the relation of the bacterial to the allergic factor, in most cases of asthma it is necessary to consider both. Whereas the factor of allergy to outside causes certainly shows spontaneous improvement in many cases, such as the children who outgrow their idiosyncrasies to food, the bacterial factor tends to progress and produce more injury. We may assume that whatever direct harm the outside factors do to the hypersensitive mucous membranes, it is far less than that done by bacterial agents. Although their work in these cases is usually slow, they apparently no less certainly on that account may cause crippling of the chest over a period of years, and the final result may be permanent damage and disability, due to the condition of the chest which we call emphysema and chronic bronchitis. It is, therefore, important to reckon with the bacterial factor, and the following measures are available.

*Measures directed against bacterial in-*



*fection in asthma.* First, general hygiene, sunlight and the avoidance of fatigue and chilling, in order to prevent advance of the chronic infection. Second, adequate nutrition, including the use of glucose in thin subjects and during acute symptoms, where so much muscle work is done. Third, the removal of focal infection, according to a definite program based on the physical condition of the patient. That is to say, that no general rule can be applied to all cases regarding the elimination of focal infection. Experience must guide. Fourth, the use of vaccines.

Concerning vaccines, we feel that it is best to use autogenous vaccines made from the patient's sputum after examination of several samples. Where expectoration is only periodic, the patient must be given a sterile bottle, the specimen to be returned to the laboratory as soon as possible following the period of expectoration. Where there is a recurrence of subacute or acute infection, the sample should be taken just after the period of aggravation of symptoms, if possible.

*Obtaining the organism and the preliminary skin test.* It is important to direct the patient to avoid excess of saliva, and to bring the specimen to the laboratory, or send it in, within 1-2 hours after its production. The organisms are best grown by spreading the smaller spirals or perles of Laennec, washed free from surrounding mucus, on the surface of blood plates. The vaccine is made when possible from the first growth, where predominance of a single type of organism or a similar mixture of organisms has been found reasonably constant. It is best to make the vaccine relatively dilute, about 200 million per c.c. in order that the first dose may be very small. The first dose (0.05 c.c.) is injected into the skin in order to observe whether the patient's skin will show any unusual susceptibility to the organism or organisms in the vaccine. This is usually evidenced by redness or a lump at the site of injection within 1 or 2 days thereafter. In case of a positive test, start with small doses and raise the dose cautiously. Some, though not many, asthma patients do give local, general, and focal reactions to their autogenous

vaccines, especially where focal infection exists. Symptoms of the reaction are similar to a mild "grippe" or a temporary increase in asthmatic symptoms, usually followed by increased cough and expectoration and more or less improvement in symptoms for a time. As with dust injections, the aim is to give enough at a dose to cause a mild local reaction in the arm, and to continue this mild local reaction with each dose. If no local reaction is shown, then, we increase the dose gradually, about 0.1 c.c. each time, with an interval as short as twice weekly at first until the patient has shown a mild local reaction, or the dose stands at about 1 c.c. We at times cannot give as much as 1 c.c. of an autogenous vaccine without marked local, or some general, reaction. As the dose increases the interval is lengthened, the ideal being to afford a short interval between duration of the successive local reactions. When the vaccine is made from an almost pure culture of pneumococcus or green streptococcus, or Friedlander bacillus, we persist with treatment, for it is in those cases that we have seen the best results. If the vaccine used causes no local reaction on arriving at high dosage, and there is no focal reaction or improvement in symptom following the doses, further cultures of the sputum should be made. Different organisms may be discovered, particularly if taken following or during more acute symptoms. If stock vaccines are found to give local reactions in or under the skin in small or moderate dosage, corresponding roughly to the autogenous or within 10% of the amount, this vaccine may be used without or with autogenous vaccine (in separate arms).

*In conclusion,* treatment of the average asthma case is not a simple matter, on account of the multitude of causes and presence of infection. Both factors must be looked for, and an attempt at control of both is usually necessary. Injections should usually be continued with short intervals between the periods of treatment. Occasionally the removal of a single outside factor or focus of infection is sufficient. Improvement from the continuous measures is slow, and marked by setbacks. While good results require time and

continuous control, the results sometimes obtainable make somewhat tedious methods worth while. The methods used are called treatment, but are equally an attempt at prevention.

## ASTHMA FROM THE STANDPOINT OF THE RHINOLOGIST\*

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The rhinologist in contact with asthma cases is impressed by the great frequency of infection in the upper respiratory tract. In our experience 2/3 of asthmatics have had some form of infection in the sinuses, tonsils, teeth, or bronchial tubes. Opinions differ as to the importance of these infections in causing asthma. Since Voltoline, in 1880, reported a cure of asthma following the removal of a nasal polyp, the literature on this subject has contained many articles by many authors, some of whom are enthusiastic about the results of local treatment while others believe that in spite of procedures both simple and radical the disease progresses without change. Thus, we have 2 schools; one holding that the removal of infective foci gives no relief aside from promoting the general health of the patient; the other believing that many cases of asthma with foci of infection are cured when such foci are removed.

We believe that importance of the infective element varies with each individual patient. In some asthmatics removal of infected tonsils or teeth will be followed by improvement in general health, but the asthma remains the same. Another patient, following an ethmoid operation, may be greatly improved or, less frequently, cured of asthmatic attacks.

*Mechanism of infective foci in causing asthma.* There are 2 theories; (1) Reflex theory; (2) absorption of bacterial protein.

*Reflex theory.* Various authors, particularly Sluder, have considered that bronchial spasm

was merely a reflex effect of some local stimulus in the upper air passages transmitted through the nasal ganglia to the sympathetic trunk in the neck or the vagus nerve. Phillips and Scott, in a recent admirable review of surgical procedures used for relief of asthma, declare that there is a predominance of opinion in favor of the vagus being the main bronchiomotor nerve; but there is also ample evidence that there are some bronchio-constrictor fibers in the sympathetic. Experimentally, stimulation of the sympathetic or of the vagus will produce an asthmatic attack—presumably due to constriction of the bronchial musculature.

*Absorption of bacterial protein.* Protein from the dead bodies of the bacteria or their toxins may act in the same way as any foreign protein in causing asthmatic attacks. An infection may serve as the incitant to an asthmatic attack in an "allergic individual". It is possible that patients who are not "allergic" do not develop asthma from infections. This explains how an allergic individual developing a sinus infection begins for the first time in his life to have asthma. When the infection is removed or becomes quiescent, the asthma improves or disappears until a recrudescence occurs to again set off asthma attacks. Hence, a fundamental conception is that the individual is allergic to begin with but requires some stimulus to initiate an attack. This stimulus may be pollen, food, bacterial protein, or a nerve impulse from an infection in the mucous membrane of the upper respiratory tract.

*Diagnosis.* The history is very important in roughly grouping the infective and non-infective cases. An all-the-year asthma which does not respond to changes in diet, nor give positive skin tests to the various foreign proteins, is apt to have a bacteria factor, also, asthma which persists for 5 years has an added infective element which may become permanent.

Bronchoscopy should be considered for diagnostic use in every case of asthma which does not show protein sensitization or some obvious infection in the sinuses. Dr. Jackson very aptly has said "all is not asthma that wheezes". Many cases diagnosed as asthma have been

\*(Read before the Morris County Medical Society, March 12, 1931, as part of a symposium on asthma.)



found to be due to benign or malignant neoplasms, stenosis of bronchial tubes, or foreign bodies. When these are effectually treated the supposed asthma disappears. Particularly in a child, an enlarged thymus or the presence of a foreign body must be ruled out. Examination of the nose may reveal a typical polypoid ethmoiditis with or without pus, or simply a somewhat boggy mucous membrane with hypertrophy of the turbinates. Transillumination of the sinuses is helpful, but the roentgenography is our best preliminary means of diagnosis.

When an infected antrum is diagnosed, it should be punctured, filled with sterile saline, and the saline withdrawn for microscopic cell count and culture. In this way we obtain from the sinus a specimen uncontaminated by nasal secretions. The antrum is then washed out and filled with lipiodol, and a second radiograph taken to demonstrate the condition of the antral mucous membrane. Usually we find eosinophiles and neutrophiles in the infected material withdrawn from the sinus, and we diagnose an antrum as infected when polynuclear leukocytes and bacteria are found. In an allergic patient structural changes in the mucous membrane, as shown by lipiodol radiograph, could be due to repeated edema into the tissue structure; polys and bacteria in any considerable number, however, indicate infection.

There is a so-called *hidden antrum infection* in which the bacteria reside in the subepithelial layer of the mucous membrane, not producing surface change, but causing structural changes in the tissue. A single washing from such an antrum may not grow any bacteria or show any polys, but still the infection may be a causative factor in the asthma.

Where there is disease of the frontal sinuses a history of intermittent, dull, frontal headache, particularly on bending forward or on blowing the nose, is usual. There is often tenderness on pressure at the inner frontal angle. The headaches sometimes begin after using the eyes and are mistakenly diagnosed as eye-strain. Pain behind the eyes, at the top of the head, or in occipital region, is suggestive of sphenoid disease. The sphenoid sinuses may be filled with sterile saline and

the saline withdrawn for examination through a canula inserted in the osteum. Lipiodol can then be injected and a radiograph taken to determine the condition of the mucous membrane.

Ethmoid disease usually shows up well in an x-ray picture. The presence of polyps is always strongly suggestive of ethmoid involvement. Generally speaking, pus seen in the anterior portion of the nose is coming from the frontals, anterior ethmoids, or antrum. When found postnasally it comes from the posterior ethmoids or the sphenoid. Very frequently in chronic infections no discharge will be seen in the nose or pharynx, nor will any be found in the sinuses themselves, and this dry state of sinus infection is called *hyperplastic sinusitis*, and includes the hidden antrum already described. The bacteria exist in the subepithelial layers of the mucous membrane causing a thickening of this structure but not in any surface exudation. The washings from such an antrum or sphenoid are often entirely clear and yield no growth when cultured. Absorption of bacterial protein or toxin from the organisms beneath the epithelium, however, may be a factor in causing asthma. Hence, one cannot conclude that a sinus is uninfected merely because a surface exudation does not exist. The presence of bacteria in the mucous membrane of hyperplastic cases has been beautifully demonstrated by Kistner. Both the exudative and hyperplastic stages must be regarded as simply differing phases of infection.

Infected tonsils are diagnosed by inspection and palpation; infected teeth and mastoids by physical and x-ray examinations.

#### *Pathology of nose and sinuses in asthma.*

In early stages, the mucous membrane of the nose and sinuses is swollen and the subepithelial tissues show edema and infiltration with eosinophiles. In the chronic cases the epithelial layer becomes thicker than normal, loses its cilia, and assumes the characteristics of stratified epithelium. The glands atrophy from pressure, and may be seen as cysts where their ducts have become occluded. There is considerable edema and connective tissue proliferation with infiltration of round cells and eosinophiles. Polyps form from sag-

ging of the edematous mucous membrane. Where infection is present, polyps and bacteria are added to this picture.

*Treatment.* In our experience removal of infected tonsils and teeth often improves the general condition of the individual, but it does not affect the asthma. Disease of the sinus, however, when cured, may lead to improvement, or, in rarer cases, to an actual clinical cure of the asthma. The best policy is always to proceed slowly, and simple shrinkage to promote drainage of the infected sinus is first used. If polyps or an obstructive middle turbinate hinder this drainage, they are removed. An infected antrum or sphenoid is irrigated repeatedly until the washings are clear and the cultures negative. Bacterial vaccine is made from the sinus culture, and administered in conjunction with the local treatment. Infected tonsils or teeth are removed when they appear to be factors in causing a run-down condition. Asthma of long standing may not yield readily to such treatment because of infection in the bronchial mucous membrane. Such cases should, in addition, be treated by bronchoscopic methods which remove the irritating secretion, clean out the infected contents of bronchiectatic cavities, and provide locally for the infected mucous membrane. Most asthma patients of the infective type will be improved to some degree by the above treatment, and a few, particularly early cases, will be cured, while a small number will remain without improvement.

Where conservative treatment has been without avail, we advocate removal of the infected mucous membrane of the sinuses. Ethmoid and antrums usually yield the best results following radical operation; sphenoids and frontals the poorest. Local treatment, with removal of infected tonsils or teeth, will often make the patient a better operative risk for the radical sinus operations where these are found necessary. A combination of conservative and radical measures will give a larger total number of improved cases and cures than either of these methods alone.

In conclusion, the fact must be emphasized that asthma cannot often be improved and is far less frequently cured by any one panacea.

The rhinologist who examines a patient, discovers an infected sinus, and exclaims that he will cure the asthma by operating on the sinus is unduly optimistic, to say the least. The combined efforts of the internist, allergist, and rhinologist, will effect improvement in a large number of asthma patients; but no improvement in a small proportion of the total.

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## CHILD HYGIENE

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Child hygiene should not be confused with child welfare or the medical care of sick children. Perhaps the most fitting definition is "that phase of hygiene which has for its purpose to make growth more perfect, decay less rapid, life more vigorous, and death more remote". We have come to include in it many activities, but it will be found that only those phases which can be influenced by education are considered the immediate concern of child hygiene as we have interpreted it. It is felt that all the time and energy and money appropriated for these purposes should be devoted purely for prevention.

The functions and activities of a well-organized child hygiene bureau should include:

- (1) *Those phases of public health which deal with the reduction of maternal mortality.* We would include prenatal advice to mothers by nurses, prenatal care by physicians in private practice and through prenatal clinics, medical examinations by physicians, irrespective of the attendant at labor, careful investigation of puerperal deaths, particularly those attended by midwives, and supervision of midwives.

- (2) *Those functions which deal with the reduction of infant mortality.* We would repeat the importance of prenatal care of mothers and proper obstetric care at time of delivery, the instruction of midwives in infant hygiene, instruction of mothers in infant care with special emphasis on maternal nursing, competent supervision of young infants through private supervision or Baby-Keep-



Well Stations, and instruction to mothers in the homes by visits of competent public health nurses.

(3) *The proper care of children of pre-school age.* This is to be obtained by periodic examination, by instruction to mothers in the importance of prompt and early medical attendance for all illnesses and noticeable defects, by a proper follow-up to see that deformities and defects discovered are corrected before children come to school, and by the immunization of children against small-pox and diphtheria about the age of 1 year. We would point out here that nurses who successfully acquire the mental hygiene outlook can render great service in helping mothers to adjust themselves and their children. Furthermore, since the importance of the relationship of Vitamin D to the structure of the teeth has been pointed out, and since it has been found that carious teeth are probably the result of defective structure, it becomes clear that the most effective dental prophylaxis will be found in effective child hygiene. Dental clinics for prophylactic purposes should be more largely restricted to the detection of fissures and proper care.

(4) *Continuation of supervision of children of school age.* For public health supervision it is important, in addition to competent medical examinations, to have nurses visit the homes to instruct mothers in the importance of continuing the proper care, feeding, and management of school children, as well as young infants; and to impress upon them the importance of having defects and deformities promptly corrected. In this period it becomes particularly important to reduce contagious diseases and to instruct mothers in the importance of giving proper care and rest to children with so-called minor contagious diseases. If the plan of continuous child hygiene supervision is followed, as was suggested, it becomes necessary only to continue health habits which have already been established.

(5) *Prevention of blindness.* It has long been known that a considerable percentage of blindness is a result of ophthalmia neonatorum especially that of gonorrheal origin. The use of 1% silver nitrate solution in the eyes of

new-born babies is practically a positive preventive. This is being done in almost all cases delivered by midwives. The child hygiene nurses are especially valuable in this phase of public health work, since by early visits they are able to note inflamed eyes, to arrange for prompt and accurate diagnosis, and prompt and thorough follow-up and treatment.

(6) *Illegitimate infants.* Infants of unmarried mothers present a special problem. There are reported about 1200 each year in the state of New Jersey. It is reasonable to believe that many are unreported. Proper plans of coöperation among hospitals where these mothers are delivered, social agencies, and public health departments, have done much to reduce the mortality among illegitimate infants and to obtain proper care for their mothers. In Newark, the Convalescent Home for Nursing Mothers has been particularly helpful.

(7) *Boarding homes.* The licensing of persons boarding infants has practically eliminated "baby farms" from the state of New Jersey. It has made available safe homes for those who need to be boarded out and has, furthermore, reduced considerably the number of children who are unnecessarily boarded out. This system has also reduced the number of children boarded in New Jersey from outside the state.

(8) *Coöperation with other agencies, bureaus, and departments.* The child hygiene nurse, through her intimate knowledge of thousands of families in which there are young infants, has been very effective in perfecting birth registration; assisting in the control of contagious diseases; improving sanitation and housing conditions; reporting and following up venereal diseases and tuberculosis; bringing to the attention of social agencies many family welfare problems which bear heavily upon children; and in discovering and reporting cripples and obtaining proper care for them.

What is the status of infant mortality in New Jersey? The infant mortality rate in 1918 was 112. In 1930, it was 55. Whereas in 1918 there were many counties with infant mortality rates above 100 and only a few

with infant mortality rates below 80, by 1925 there were no counties with infant mortality rates above 100 and only 15 with infant mortality rates above 80. In 1929, all the counties presented infant mortality rates below 80 and 6 presented infant mortality rates below 60.

One way of gauging what has been accomplished in New Jersey is to note the number of child hygiene nurses under state supervision alone. There are today some 135 nurses in some 500 communities; this aside from nurses under the child hygiene bureaus in the larger cities.

The infant mortality rate in Newark has shown an even greater decline. This rate in 1930 was 52.1, the lowest that has ever been reported for the city and one of the lowest in the country. It is interesting to observe that the lowest infant mortality rate has occurred in the year of the greatest economic distress. This is merely a repetition of a previous observation of the fact that the lowest infant mortality rate in Paris occurred in the Siege of 1870; and one of the lowest infant mortality rates of the cotton manufacturing cities of England occurred during the Civil War, when women were unable to obtain employment on account of the inability to obtain raw cotton from the United States. At the same time, we would point out that there has been practically no reduction in the mortality of the first month of life. The deaths in the first month now represent  $\frac{1}{2}$  of all the deaths which occur in the first year; that is, as many babies die in the first month as die in the succeeding 11 months. When we analyze the deaths in the first month we are impressed by the fact that practically  $\frac{3}{4}$  of them occur during the first day, which shows clearly the relationship between early mortality and prenatal and obstetric care.

Our studies of maternal mortality have brought out many important and interesting facts. There has been practically no reduction in maternal mortality in the past 10 years. Secondly, about  $\frac{1}{3}$  of the deaths of mothers is associated with the first 6 months of pregnancy. In this sense they should not be looked upon as obstetric deaths but merely deaths associated with the state of pregnancy. There has been a reduction in maternal mor-

tality associated with the last 3 months of pregnancy. It is, however, a matter of grave concern that the maternal mortality of this nation is higher than that of a great many foreign countries and that, even if we subtract the mortality associated with the first 6 months of pregnancy, our mortality is still higher than that of the Netherlands, Norway, Sweden, and Italy.

While there has been this reduction in infant mortality, it is worth while to point out that this reduction has not been uniform. In the city of Newark, the mortality rate varies considerably in various wards, some presenting rates as high as those which were reported for that city 15 years ago. This is particularly true in the wards which present a large colored population. When we examine the causes for this reduction in infant mortality, considerable information is obtained by observing the mortality by seasons. Whereas in 1914-15 there was a high peak of mortality in the months of July and August, today there is a valley in the mortality graph for those months. In short, the safest period of the year for an infant under 1 year of age in Newark is in the month of July. You will be prepared, then, for the observation that the greatest reduction has occurred in the diarrheal diseases. If we were to compare the specific death rate for infants in 1929-30 with that of 1920-21, we would find that the rate is only about  $\frac{1}{3}$  of what it was 10 years ago.

There has been a reduction in the deaths under 1 year from whooping-cough and measles and, likewise, meningitis. We believe that this is a concomitant result of the general improvement in the care, management, early diagnosis, and treatment of infants.

Now, as we have reviewed the saving of life which has come from practically the elimination of diarrheal diseases of infancy and from the concomitant result observed in whooping-cough and measles, we are the more impressed by the fact that in the past 10 years there has been practically no reduction in the deaths in the first year of life associated with early infancy and with bronchitis and pneumonia. It is clear that further progress in the reduction of infant mortality will have to come from the development of methods which



will prevent maternal mortality, premature birth, cerebral hemorrhage, and then the more effective control of respiratory diseases.

## REFRACTION AND HEALTH\*

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Dr. George E. de Schweinitz, in an address before the Medical and Chirurgical Faculty of Maryland, April 26, 1900, said: "It is unquestionably true that fully 75% of ocular disorders depend on anomalies of the refraction, accommodation, or muscle balance of the eyes. Correction of such faults is followed by the greatest good to the eye and to the general organism in which the strain has been interpreted by symptoms not necessarily suggestive of their origin. When one comes to think about them, these symptoms stretch out into an extraordinary train, but we have ceased to wonder, and as a matter of course investigate, or cause to be investigated, the eyes whenever searching for the etiology of headache of all kinds, migraine, vertigo, nausea, pseudo and habit chorea, neurasthenia, and other disease-phenomena of similar manifestation. We have learned that many so-called gastric troubles—tachycardia, flatulent and other types of dyspepsia, indigestions, night terrors, especially as they occur in children—may have a like origin, and we have found out that pains strangely and persistently situated in the nape of the neck, between and under the shoulder blades, at the end of the spine and deep in the mastoid, may owe their origin to the same cause. These facts are widely—I was about to say almost universally—known, although, curiously enough, many of the most important of them find no place in the most-used text-books on general medicine."

That eye-strain may produce symptoms apparently unrelated to the eyes but seemingly arising from disease or dysfunction of some

distant organ, has been known for more than 50 years. Silas Weir Mitchell, in 1874, wrote a paper on the relation of nervous disorders to eye-strain and presented a series of cases in which such disorders were corrected by the wearing of glasses. In 1876, another paper appeared from the same pen, upon the relation of headaches to eye-strain. These 2 masterpieces did more to awaken the ophthalmologist to the remote symptoms produced by refractive errors, and to the need for accurate refraction, than perhaps any others.

George M. Gould, 30 years ago, wrote voluminously on this subject. He was considered an extremist because of the large number of diseases and symptoms he attributed to eye-strain. Today, ophthalmologists know that while some of his statements have been shown to be exaggerations, a considerable portion of his assertions were true, and for the relief of those symptoms Gould emphasized the fact that only an accurate refraction examination is of any value. Today we see a large percentage of patients referred for relief of remote symptoms. To discuss all of them would require more time than we have allotted to us. A few will suffice.

Headaches, especially frontal; although temporal, occipital, and parietal headaches are common; hemicrania; headaches associated with nausea and vomiting; carsickness; panorama headaches, the headache acquired at the movies, a ball game, or in crowds anywhere; vertigo; headtilting and the compensatory scoliosis that often accompanies it; tachycardia; anorexia; indigestion; flatulence; hyperacidity; constipation; pains most anywhere; neuralgia; paresthesias; tics; neurasthenia; nervousness; insomnia; sleepiness; and a host of other complaints are frequently associated with eye-strain.

Besides these reflex symptoms, the common local symptoms are burning and itching of the eyes; heavy lids; blepharitis; conjunctival hyperemia; blurred vision; poor near or distant vision; photophobia; and spots before the eyes.

Of course, all these symptoms so commonly associated with refractive errors may occur with disorders of other organs. Sinusitis, nasal obstruction, gastric and hepatic disorders,

\*(An address given before the Camden County Medical Society, April 7, 1931, as part of a symposium upon ophthalmology.)

constipation, and prostatic disease, commonly give rise to hyperemia of the conjunctiva, pain in the eyes, vertigo, nausea and vomiting. Chronic otitis media is a common source of headache, vertigo, nausea and vomiting. Pelvic conditions, diseases of the brain and central nervous system, in fact almost any chronic disorder may produce symptoms suggestive of eye-strain.

Hence, in refraction, the eye physician is first faced by the problem of determining if the symptoms complained of are due to an ocular defect. Second, he determines if the symptoms arise from disease of the eyes rather than from a refractive error. Third, if no ocular disease exists, the refractive error is estimated and accurately corrected. Last, maladjustments of the ocular muscles are investigated and cared for.

Refraction can be defined as the determination of errors of the focus of the eye. But it is desirable at this time to deal with refraction in a broader sense. In the beginning a careful history should be taken. The vision of each eye for near and far is noted. The balance of the extra-ocular muscles, with the eyes at functional rest, is determined. Prism-duction tests are made to determine the strength of various muscle groups. Each eye is then studied externally. That is followed by an ophthalmoscopic examination. In other words, no case is assumed to be a "refraction case" until all other ocular possibilities are ruled out. The search for ocular pathology is the first aim of the examination. Very frequently, some abnormality is found, which abnormality may be purely ocular or may be a manifestation of some general disease or of disease in some remote part of the body. Here again, the eye physician is of much service to the patient and the family doctor. Frequently, evidences of diabetes, nephritis, tabes dorsalis, brain tumor, syphilis, tuberculosis, nasal accessory sinus disease, focal infection, and many other conditions, are found in the eye before general signs and symptoms are manifest.

The eye is a part of the body. It cannot be divorced therefrom without loss of function. It must be so considered. Only a physician can be competent to recognize all the possi-

bilities that this relationship implies. Only *he* is sufficiently interested to ferret out possible disease. Only *he* is permitted to treat disease when found. The essential thing, then, is neither the prescribing nor the fitting of glasses but proper diagnosis of the condition present. After the diagnosis of refractive error is made, the ophthalmologist proceeds to the refraction proper.

In persons under presbyopic age it is customary to use "drops" of some kind. The purpose of these "drops" is to quiet accommodation. It is hardly necessary to explain the value of cycloplegics to physicians. I might, however, recall to your minds that the process of accommodation is one not well controlled by the will. Accommodation is constantly changing. To estimate refraction of an eye with accommodation present is to attempt to measure a constantly altering quantity. It is just as ridiculous as weighing a person who is jumping up and down upon a scale.

A correction of refractive error, to be of any great value, must be exact. An approximation of this error is not enough, if the symptoms are to be relieved. Such correction should be the same as the error, to within  $\frac{1}{8}$  of a diopter.

Retinoscopy, an objective method of determining the refraction, can be done with great precision when cycloplegics are used. Then the subjective method need be used only as a check upon the observations of the physician. As with all methods used by science, the objective method is more reliable and more exact than the subjective. Of course, retinoscopy can be done without cycloplegia, but no accurate estimation of refraction can thus be made. A band of 1 to 3 diopters is found at every point in which the shadow test may be "with" one time and "against" the next time. Dynamic retinoscopy, as this is called in contradistinction to static retinoscopy as done under cycloplegia, is a snare and a delusion. It will not even diagnose between hyperopia and myopia unless the error is high.

Then, there is another reason for using "drops"; and that is for dilatation of the pupil so that a thorough examination of the interior of the eye can be made. No one can ascertain with any exactitude the condition of



the periphery of the lens through a small pupil, and that is where senile cataract usually begins. Nor can the vitreous be well inspected for opacities. The macula frequently is difficult to see through a small pupil, and there, again, pathology is frequently found. The periphery of the retina cannot be observed through a 2.5 mm. pupil, and anterior chorioiditis is no rarity. Certainly, no one can say he has examined an eye until he has studied it ophthalmoscopically through a dilated pupil. Hence, in patients long past the age where accommodation is active, pupils are dilated unless signs suggestive of glaucoma are present. In older patients, however, no cycloplegic, such as atropin, scopolamin or homatropin is used; instead, cocain, eucotropin, ephedrin or some other weak mydriatic is instilled. Following the fundus examination in these older people, a retinoscopy may be made through the dilated pupil. Personally, I do this routinely. When all examinations are completed that require a dilated pupil, a miotic, such as pilocarpin or eserine, may be instilled, which in a short time overcomes the pupillary dilatation.

Another important thing that should be mentioned about the use of cycloplegia is that the eye is put at rest for a period of time depending upon the drug used. This permits the retina, chorioid and ciliary body to recover from the irritation and congestion incident to eye-strain.

As for danger from the use of cycloplegics, one can but point to statistics from large eye clinics, where thousands of cases are refracted yearly and where untoward effects of any kind are of exceeding rarity. At the Wills Eye Hospital, a report was given about 1 year ago of all cases refracted within 3 years preceding the report, and in 30,000 refraction cases no complication of any consequence was noted.

After the drops have worn off, another examination is made; the postcycloplegic examination. In hypermetropic patients the amount

of plus sphere that they will accept is determined. Myopic patients are given the exact correction found under cycloplegia unless such correction is very high, when a reduction may be made. The most important part of the postcycloplegic examination, however, is determination of the muscle balance while wearing the new correction. The latent tendencies to deviation of the eyes from the parallel, the heterophoria, should never be neglected. The tendency for one eye to be higher than the other, hyperphoria, if of sufficient amount, should be corrected with a prism ground into the glasses. Tendency for the eyes to turn out, exophoria, is treated by exercises and reduction of convex sphere. Frequently, exophoria and convergence insufficiency are the result of ethmoid disease, and treatment of the latter condition is required before any relief can be obtained for the ocular muscle disturbance. The tendency of the eyes to turn in, esophoria, is treated with the stereoscope and giving full convex spheres. Heterophoria is the frequent cause of eye-strain and no ocular examination is complete without investigation of the ocular muscles. Numerous patients are seen suffering with dizziness, nervousness, nausea, indigestion and headache, who are wearing a proper refraction correction but whose muscular imbalance has been neglected. These patients can be relieved only by treatment of the heterophoria.

To summarize:

The purpose of refraction is much broader than the term implies and is best epitomized in the phrase, "ocular examination". The purpose of refraction in this broader sense is to discover the causes of the symptoms; first, whether they are ocular at all, ocular in part, or ocular entirely; second, whether the symptoms arise from some disease of the eyes; third, to make an exact determination of the refractive error; fourth, the muscular balance and abnormal muscular tendencies are determined and treated.

## SQUINT IN CHILDHOOD AND ITS EFFECT IN LATER LIFE

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The detection of squint in children at the earliest age, and the etiologic factors involved, together with measures taken in correction of squint and the effect in later life, is briefly the scope of this paper. The importance of the ex-

competent hands, so as to receive the greatest benefit during important years of development, when the visual elements, fusion faculties, and ocular muscle movement coördinations are being established.

A frequent expression heard from mothers is: "I thought the child would outgrow the condition." Sometimes, on advice of anxious relatives and friends, nothing is done, waiting the time for the child to outgrow the defect. The eyes may appear straight to them, but there may be a latent defect giving



FIG. 1. CONVERGENT STRABISMUS  
E. P. Aged 4 years

Right eye convergent. Refractive error—Compound Hyperopic Astigmatism.



FIG. 2. CONVERGENT STRABISMUS  
E. P. Same as figure 1

Showing correction of convergent right eye with glasses. Using glasses one year.

amination of children's eyes, especially during the pre-school age, should be emphasized. Many conditions of children's eyes go unrecognized until later years, when correction of the defect becomes more difficult and the result unsatisfactory. There is no reason for conditions like congenital cataract, the various forms of keratitis, phlyctenular conjunctivitis, blepharitis, and squint, to be present for years, even until the twenties and thirties, and then having to be corrected by a spectacular operation for restoring vision to a person blind from birth. These conditions should be diagnosed between 1 and 5 years of age, if in

rise to severe symptoms of eye-strain. The result of delay being poor vision in one eye.

Squint, or strabismus, is a condition in which the visual lines of the two eyes do not intersect at the point of fixation, and is manifested by a deviation in, out, up or down, of the eye. With the advance of our knowledge in regard to this subject, it has become known that scarcely one case of squint is like another, for it is not simply a faulty position of one eye, but rather the external symptom of one or another of various disturbances.



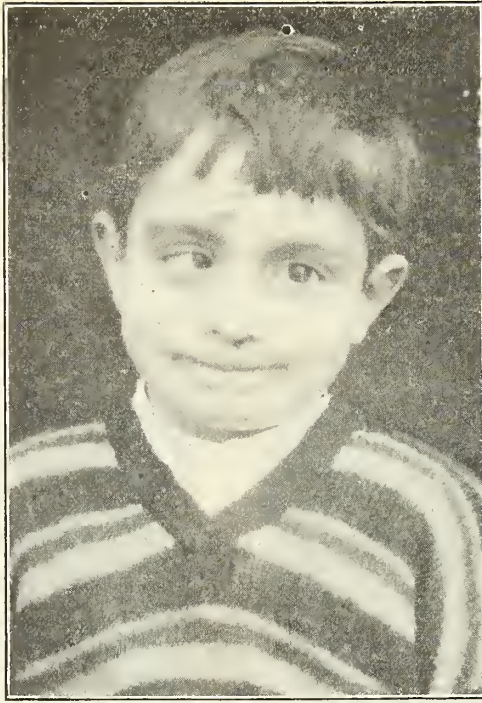


FIG. 3. CONVERGENT STRABISMUS  
(Esotropia.)

W. P. Aged 4 years  
Right eye convergent. Refractive error—Compound  
Hyperopic Astigmatism.



FIG. 4. CONVERGENT STRABISMUS  
(Esotropia)

W. P. Same as figure 3  
Aged 5 years, right eye convergent.



FIG. 5. CONVERGENT STRABISMUS  
(Esotropia)

W. P. Same as figure 4  
Showing improvement with glasses; glasses 3  
months; Compound Hyperopic Astigmatism.

In the majority of cases, if one eye fixes an object with the fovea, the other will do so too, giving rise to binocular fixation. In fact, the whole extremely complicated mechanism of muscles and nerves with which the eyes are supplied, is designed primarily to accomplish this single end; i.e. to so move the eyes that they shall both be directed accurately to the object we wish to see, and that each shall receive the image precisely upon the fovea. The movements of both eyes are hence al-

strain with refractive error. There is a tendency to squint, becoming manifest only on covering one eye. In the third class of cases, only one eye is straight (fixes the object) at a given time, the other deviating even when both eyes are uncovered. This condition is squint, strabismus or heterotropia.

Briefly, there are 3 types of squint: first, convergent squint, when the eye turns in toward the nose—the most common variety; second, divergent squint, when the eye turns



FIG. 6. DIVERGENT STRABISMUS  
(Exotropia)

I. M. Aged 6 years

Right eye turns outward; refractive error—Compound Myopic Astigmatism (R). Hyperopic Astigmatism (L.)



FIG. 7. DIVERGENT STRABISMUS

I. M. Aged 6 years

Same as figure 6, right eye turns outward, showing correction with glasses; using glasses 6 months.

most invariably coordinated so as to secure binocular fixation under all conditions. When both eyes fix the same object, they are said to be straight. This is regarded as the ideal or natural condition. In other instances both eyes will look straight at the same object when both are uncovered, but either eye, as soon as it is covered, will deviate—turning out, in, up or down. This is looked on as an “insufficiency” (heterophoria), which may give rise to squint, and is indicative of eye-

outward away from the nose; and third, vertical squint, when the eye turns either up or down.

Convergent squint, or “cross-eye”, develops between 1 and 5 years of age in the greater percentage of cases. First, the eye turns in toward the nose only at certain times; at other times the eyes are straight. This is the forerunner of a constant convergent squint. In 80% of cases the squint is monocular from the first; while in about 20% sometimes one and sometimes the other eye turns in, and we have



alternating squint. Statistics show that the monocular variety begins in about 75% of cases toward the end of the fourth year, and that the alternating variety appears rather earlier in 25% of cases, sometimes as early as the age of 6 months. It is impossible to demonstrate by one or by several cases all of the phenomena we meet with in convergent squint, but the following cardinal symptoms are generally to be found, more or less marked, in every case: (1) The convergence power is excessive; (2) the power of fusion is im-

perfectly developed; (3) the visual sensation of the squinting eye is suppressed; (4) its vision is subnormal; (5) usually the eyes are hyperopic or have hyperopic astigmatism. Convergence excess is usually accommodative; i.e. the child in trying to see well forces the accommodation, and hence also forces the convergence, as the two are closely associated. This is true especially when the child is trying to overcome a hyperopia or hyperopic astigmatism, which is almost always present in con-

vergent squint. The squint is increased as soon as the child begins to use the eyes for near work, as a spasmodic convergence takes place. Little by little the deviation increases until binocular fixation becomes impossible. At this stage, suppression of the image of the squinting eye takes place, with a resulting failure of visual elements and fusion to develop; so that the longer the squint has existed, the less the vision and the more difficult is development of the fusion faculty. Hence, it is never too early for treatment of a de-

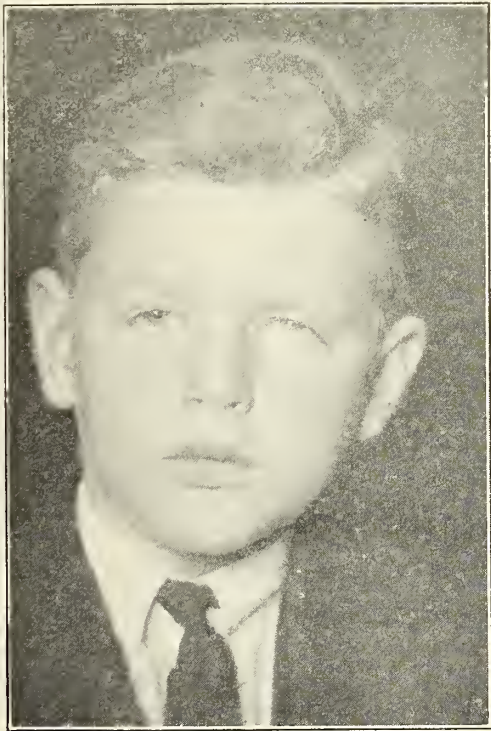


FIG. 8. VERTICAL STRABISMUS  
(Left Hypertropia)  
R. F. Aged 11 years  
Left eye turns upward. Refractive error—Compound Hyperopic Astigmatism.

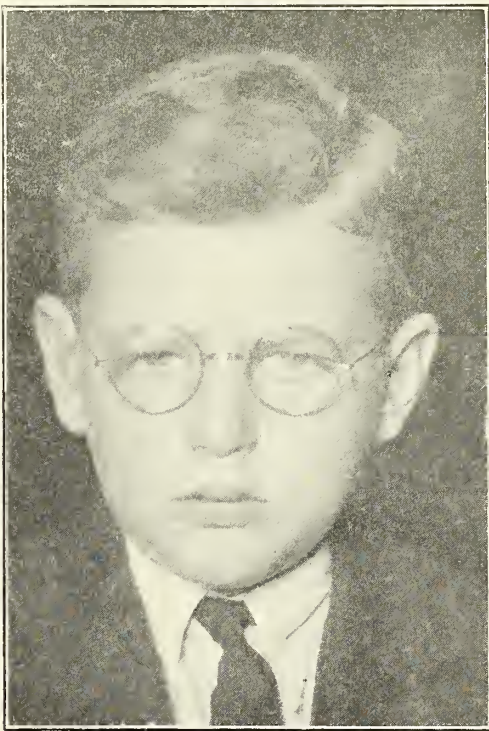


FIG. 9. VERTICAL STRABISMUS  
(Left Hypertropia)  
R. F. Aged 11 years  
Same as figure 8; left eye turns upward showing correction with glasses and prism; glasses 3½ years; Compound Hyperopic Astigmatism.

perfectly developed; (3) the visual sensation of the squinting eye is suppressed; (4) its vision is subnormal; (5) usually the eyes are hyperopic or have hyperopic astigmatism. Convergence excess is usually accommodative; i.e. the child in trying to see well forces the accommodation, and hence also forces the convergence, as the two are closely associated. This is true especially when the child is trying to overcome a hyperopia or hyperopic astigmatism, which is almost always present in con-

veloping convergent squint, but it is often too late. Under no circumstances should a physician put off the parents of such children, for the cases of convergent squint that disappear later with development of the child and its ocular functions, are rare exceptions. The physician should send children with commencing strabismus to the ophthalmologist, that he may take the initiative, even though they are only a few months old.

Divergent squint is seen more frequently in myopia. As accommodation and convergence are intimately associated, the disuse of one means disuse of the other. A myope, for example, to see objects nearby, needs to use little or no accommodation; consequently the impulse to converge is too weak. Disuse of convergence allows the eye to deviate outward in high degrees of myopia, gradually producing divergent squint.

Conditions affecting the vision, such as congenital cataract, central chorioiditis, corneal opacities, and marked myopic astigmatism interfere with fixation, and, as a consequence, the non-seeing eye deviates outward, producing divergent squint.

Vertical squint in many instances is caused by paresis, or at least insufficiency of one of the elevator or depressor muscles of the eye. Some cases are spasmodic in origin.

In the treatment of squint, the most important consideration is the refractive error. Excessive accommodation should be corrected in convergent squint, and deficient accommodation in divergent squint, by proper glasses. The earlier the age this is done, the better the results, and the more useful the vision in the squinting eye. Binocular fixation should be obtained as early as possible to prevent amblyopia. Congenital cataracts, diseased conditions and astigmatism should be diagnosed at the earliest age and corrected. Measures to develop fusion and correct the amblyopia must be undertaken in connection with the use of glasses. In former times, the treatment seemed fairly simple to correct the position of the squinting eye by operative measures; but now, operation is the last resort, after every other possible method to improve the condition has failed.

The effect of squint, in later life, is monocular sight, with greatly reduced vision in the squinting eye. The visual elements have not developed, and consequently amblyopia is marked. The result is the same, practically, as a one-eyed person; deficient perception of depth and absence of stereoscopic vision. The cosmetic effect is readily appreciated, and often, for this reason, operation is undertaken, although in later years improvement in vision

and binocular fixation are not apt to result, even after operation which corrects deviation of the squinting eye.

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## COMMON CONDITIONS IN INDUSTRIAL OPHTHALMOLOGY

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Camden, N. J.

Industrial ophthalmology is really a phase of general medicine and concerns traumatic affections, infections and occupational eye lesions. It is my purpose in this brief paper to discuss only some of the common conditions with which we are confronted and to bring out a few salient factors in the handling of such cases.

Affections of different parts of the eye give entirely different symptoms. A careful history is in every case extremely important for the correct diagnosis and proper handling of the case. I stress this point because misleading histories of the accident, as told by the patient, may not agree with the physical signs present and will often mask the underlying condition.

The lids are nature's first line of defense in protection against injury of the eye and its contents. When danger threatens, the lids involuntarily close and prevent or minimize the effect of an accident. The injuries common to this region are wounds (incised, lacerated and contused), burns and retained foreign bodies. Treatment is the same as for any other part of the body and concerns guarding against infection and care in suturing to prevent deformity, such as turning in or out of the lid, with resultant chronic inflammation of the eye. Emphysema, if present, is usually associated with fracture of the floor or nasal wall of the orbit. If swelling is marked, pricking of the tissues to allow escape of air is recommended. If the laceration is complete, careful inspection of the external coats of the eyeball is necessary, as further damage may have occurred. If a hemorrhage of the lid is present, eliminate



the possibility of a foreign body, by history and x-rays, if history is suspicious. For the ordinary hemorrhage or ecchymosis, ice compresses applied during the first 24 hours, followed by heat, afford the best relief and hasten absorption of the blood. Lead water and laudanum are of some help.

Should the lids fail to prevent entrance of the foreign body or inflammatory products, then we have nature's second line of defense, before perforation and rupture of the eyeball can occur; this is the cornea, conjunctiva and the dense sclera. The most common condition involving these parts is a conjunctivitis; the injection may be slight or marked, and pain, lacrimation and discharge may be mild or pronounced. Treatment of the conjunctivitis depends on the cause. If a foreign body is present, removal of the foreign body, and use of a simple boric acid wash containing holocain afford relief. In seeking for the foreign body, both the upper and lower lids should be examined, as well as the cornea. If no foreign body is present, and if the main complaint is a scratching sensation, referred to the upper lid, one must eliminate the possibility of an abrasion of the cornea. For detection of a corneal abrasion a drop of 2% solution of fluorescein on the cornea will reveal any denuded corneal epithelium, which will stain green while normal tissue will remain unstained. Mercurochrome 2% solution will act the same way, staining the denuded area a red-brown.

One drop of an anesthetic, preferably 1% holocain hydrochloride, and protecting the eye from light with a gauze dressing, yield almost complete relief. Cocain may also be used in the eye as an anesthetic for relief of pain. Cocain, although a good anesthetic, has disadvantages; it causes dryness of the cornea and interferes with the healing process by cutting off nutrition and causing a desquamation of the epithelium; it may also increase tension, and cause an attack of acute glaucoma in a potential or actual glaucoma case. For this reason, it is rather dangerous to instil cocain in the eyes of people beyond the mid-span of life, without first taking the tension, either by palpation or with the tenometer, or examining the fundus with the ophthalmos-

cope. In an acutely red eye, atropin or homatropin should be used with care for the same reason.

The cornea may be involved in various manners. The most common condition is presence of a foreign body. Removal of the foreign body is important because of the possibility of infection, scarring of the cornea and ultimate blindness. Detection of ulcer is possible by staining with fluorescein. The entire cornea, or a small sector, may be involved as a type of traumatic keratitis. Perforation of the cornea may occur and the damage done depends on the structures injured. Involvement of the lens causes an opacity (cataract), and there may be an escape of aqueous humor from the anterior chamber, with incarceration of the iris in the wound. Perforation may also cause detachment of the retina or of chorioid layers of the eyeball, or rupture of the chorioid. In these cases of perforation of the eyeball eliminate the possibility of an intra-ocular foreign body by x-rays, and not only avoid loss of the injured eye but also prevent loss of the other eye as in sympathetic ophthalmia. If the prolapsed iris cannot be pulled back into original position, either by atropin or eserine, then operative procedure is advisable. A blow to the eye by a blunt instrument may cause detachment of the retina or ruptured chorioid and edema of the retinal layer, without any external evidence of pathology. Infection in these cases of perforation are not infrequent and may cause panophthalmitis, i.e., infection of the entire eyeball.

Acid and lime burns are not only painful but may, and often do, cause ultimate blindness because of resultant scars in the cornea. These cases show an intense injection of the eyeball and an involvement of the cornea. Flushing with cold tap water several times, as soon as possible, is a great help, not only for relief of pain, but also to lessen the corneal involvement. Installation of any oil, holocain for relief of pain, tropin (if no danger of glaucoma) and ice compresses the first 24 hours will make the patient quite comfortable and will lessen edema of the tissues. Adhesions between cornea and lids frequently occur and should be prevented, if possible, by

daily probing of the upper and lower lids. Involvement of the uveal tract, iritis—iridocyclitis, or uveitis—usually follows marked burns. Foreign body in the cornea, conjunctiva or sclera is not serious or dangerous in itself as a general rule. The danger lies in the dreaded aftermath of infection. In the cornea this infection, corneal ulcer or abscess, is very important because even small scars if situated in the pupillary space may cause loss of vision and necessitate an operation (optical iridectomy) for the restoration of vision.

Traumatism to the eye may cause a flaring up of a perfectly quiet constitutional disease such as syphilis or tuberculosis of the eye. Traumatism may also start an acute attack of glaucoma.

The handling of an injured eye should be conservative from the first, to maintain vision, preserve appearance, and relieve pain. A most trivial accident may, through ignorance or neglect of the patient, result in total loss of vision in the affected eye or both eyes. The industrial worker should be taught that the best first aid in most cases is to leave the eye alone, to irrigate with cold clear water, use a clean cloth and to go at once to his physician.

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## MEDICAL POSSIBILITIES OF SEA WATER

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The idea of the sea as a source of health is ancient. Greeks and Romans, profoundly influenced in all phases of their lives by the surrounding Mediterranean, developed seaside resorts as modern nations have done. To Venus, their ideal of female physical perfection, their religion ascribed a marine origin; she arose from the sea. In our own time, Lafcadio Hearn wrote: "Thou primordial Sea, the awfulness of whose antiquity hath stricken all mythology dumb \* \* \* \* whence thine eternal youth? \* \* \* \* Still is thy quickening breath an elixir unto them that flee to thee for life."

Romance may be the precursor of scientific

realization, as witness Tennyson's poetic forecast of aerial commerce and warfare. Our present conception of salt water as a health restoring agency is atavistic. Primitive people of coastal regions probably recognized the benefit of sea bathing before they evolved a language to describe it. Now, there is enough biologic, chemical and evolutionary data to justify study of sea water thrown directly into the circulating blood of human beings, as food for the tissues in conditions of poor nutrition. The accepted, logical theory of the origin of life being that it began in the ocean, millions of years ago, as single-celled organisms deriving their existence directly from sea water, a second theory may be drawn from this first one. For present purposes, we will restrict this second theory to man though it applies to vertebrates generally. It is that the human cell, in all its specialized variations, has inherited from the primordial ancestral cell, a physiologic craving for the chemical constituents of sea water. This theory, though it were mere assumption, would be justified as a basis of investigation, but it also rests on good circumstantial evidence. A primitive multicellular type is an open sac whose wall is a single layer of unspecialized cells. Sea water flows in and out and at least 2 surfaces of each cell are in contact with it. The body wall, at a later stage, thickens, becoming a mass of buried cells bounded by outer and inner cell layers. The sea water reaches all parts of the cell mass through channels pushed out from the body cavity, and it begins to carry prepared nutriment because the lining cells of the cavity are acquiring the function of digesting organisms of the preceding types which, of course, continue to exist. As the progressive types go on developing, this rudimentary circulation must be replaced by a pressure system, and channels are replaced by a closed system of tubing, forerunners of vertebrate blood and lymph vessels. A contractile vesicle, forerunner of the vertebrate heart, pumps the contained fluid through them. So, each organism of advancing type carries, within itself, its own little sea, which we will call blood.

This blood, cut off from the parent sea, receives and delivers its water, its dissolved



salts, and its dissolved nutritive and excretory material, by transudation through cell membranes. But, as a fundamental solution of inorganic salts, it is and must remain sea water of the geologic period at which the vertebrate type of circulation was developed. The inorganic salts of the blood are now derived from the food. Food being normally in excess of requirements, the problem of keeping the saline concentration of the blood at the only figure the cells will tolerate, after closure of the circulation, becomes one of selective elimination. This problem is solved by the recently evolved kidney. From the pre-Cambrian or early Cambrian period of geology, when vertebrate life was in the making and blood and sea water had the same salt concentration, down to the present, the sea, according to scientific evidence, has been increasing its concentration. But during all the millions of years that have elapsed, the kidney has, according to equally good evidence, kept blood concentration at the original point. This fascinating theory, now generally accepted, was advanced by Macallum, in an article published in the Transactions of the Philadelphia College of Physicians for 1917. Credit is given here, because my obligations to this scientist cannot be expressed adequately in a footnote.

Sea water contains about 35 parts per 1000 of dissolved salts. These salts, in parts per 1000, are: Sodium chloride, 27.21; magnesium chloride, 3.81; magnesium sulphate, 1.66; calcium sulphate, 1.26; potassium sulphate, 0.86; calcium carbonate, 0.12; magnesium bromide, 0.08. Sea water also contains minute amounts of iron, lead, copper, manganese, barium, strontium, iodine, fluorine, and various other elements, free or in combination. Even gold has been detected in it. The mineral salt content of blood is much less than that of sea water. Sodium chloride forms the greater part of the salt content of both fluids, but sea water contains about 5 times as much of it as does blood; in a previous article, a mathematic error made me say a little more than 3 times as much.

Macallum has estimated the percentage concentration of sodium, potassium, calcium and

magnesium in sea water and in various serums and sodium is rated at 100 in each case.

The figures for sea water are: Sodium, 100; potassium, 3.6; calcium, 3.9; magnesium, 12.1. The figures for human serum are: Sodium, 100; potassium, 6.1; calcium, 2.7; magnesium, 0.9. The discrepancies between these 2 sets of figures indicate that, since the evolution of the kidney, the salts of the sea have been concentrating at unequal rates, the magnesium salts much faster than the others. Geologic evidence points, more directly, to the same conclusion. Sea water of the early paleozoic era was, no doubt, a fine physiologic fluid, with no doctors or patients to make use of it. But sea water of the present era cannot even be made into a physiologic fluid by diluting it. "Quinton's serum" is about isotonic with human serum; 190 parts distilled water and 83 parts sea water, but it contains 0.89% sodium chloride, as against 0.56% for human serum, and yet comes nowhere near balancing the excess of magnesium salts.

While some chemical knowledge is essential, investigation of the therapeutics of sea water should, in my opinion, rest mainly on biologic and evolutionary grounds. I began to study the subject on this basis 5 years ago. I knew that others had preceded me, but I did not know anything about their work, and I decided that, conceding them all honor and priority, I would learn more by working the matter out independently.

I started with the idea that sea water might be a tissue food, supplying certain tissues with certain material, their supply of which had been depleted. Given intravenously, it might do this more rapidly and effectively than it could be done through the digestive system. Tissue repair is a slow process. It seemed as though small, frequently repeated doses would be the best mode of administration. Another idea, the origin of which I do not know, is that sea water may, in some unknown way, activate certain metabolic functions that are failing. This is a purely theoretic conception, but the subject of this article goes beyond the present limits of biochemistry, and must be worked out by first assuming theories and then proving or disproving them by clinical

methods. Having decided on small doses, my next object was to keep the amount of fluid injected within the convenient limits of hand syringes. This, of course, made it desirable to use undiluted sea water, other things being equal. Having a small urologic service in a hospital, I there began giving intravenous injections of undiluted sea water, rather indiscriminately and somewhat to the mystification of the rest of the staff.

The first doses given were 5 c.c. This was gradually run up to 50 c.c. without any bad effects being noticed. Later, I set the limit at 30 c.c., because results indicated that amount to be enough, and because a 30 c.c. hand syringe is the largest size that I can conveniently use in routine work.

According to Martinet, the salt water for "Quinton's serum" is collected aseptically, some distance off shore, at a depth of 10 meters and sterilized (?) by filtration. In contrast to this, most of the water I have used has been collected at Long Island beaches, at the surface, within easy swimming distance of the shore. The therapeutic value of sea water may lie, in whole or in part, in materials present in such small amount as to defy analysis. If this is so, and the possibility is one to be reckoned with, then such materials may, quite conceivably, be most abundant in shallow water exposed to the joint influences of sunlight and the ocean bed; may even be, in part, products of the beach itself, exposed twice a day to the water and then to the air and light. Our present knowledge of life processes strongly suggests that life had its humble beginnings in such an environment rather than among raging waves. These theoretic considerations accorded with the practical one of getting clean water, free from visible suspended matter. At first, most lots collected did not meet this requirement. Later, I found that on days when the surf was flattened by off shore winds I could get water of spring-like clarity over sand bars, in the vicinity of inlets, at or near low tide. Thus, the water I use is, in part, the outflow from Great South Bay, a large, shallow, landlocked salt water basin. Approved for bathing purposes, as my supply is, I nevertheless had my own tests made. Some samples showed colon

bacilli, but always far within the safety limit for public water supplies.

On the day of collection, the water is run through 2 layers of filter paper; tap water being run through first to remove possible loose shreds of paper. After filtration, the sea water is pasteurized by setting the container in boiling water for 20 minutes. It is pasteurized again the next day, and every 10 days thereafter, as long as it is kept in storage. Furthermore, each dose is separately refiltered and repasteurized the day it is given. Mason jars are used for collection and chemical flasks for pasteurization and storage. My present rule is to discard water stored longer than 2 months. Injections are made at the bend of the elbow, with a 30 c.c. all glass syringe and a 5/8 inch, 23 gauge needle.

Practical work to date covers about 700 injections given to about 100 patients; 37 had 12 injections given at the rate of 2 or 3 a week. This is what I call, arbitrarily, a course of treatment. One patient had a second course, given 6 months after the first, and 5 others 1½ to 2 courses with no intermission after the first 12 injections. All patients were adults.

So far, indications for this treatment have been held down, strictly, to malnutrition and nervous exhaustion in adults, although in the beginning, before I had established any indications, I treated a few cancer cases in the hospital. These indications are common enough in an office practice like mine, composed mostly of syphilitic and minor urologic conditions. Patients suffering acutely from these primary diseases were excluded; also rōués, whose mode of living would negative the effect of reconstructive treatment. Lately, a few cases of nervous exhaustion with no evident causative or co-existent disease have been treated. Most patients were not told that they were getting sea water, lest the novelty of the treatment should lead to exaggeration of results. Of the 43 who had 12 or more injections, 3 had treatment for syphilis and 10 had intramuscular injections of iron cacodylate during the same time.

Results, in such cases, are mainly to be judged by what the patients themselves report, and these reports have been very satis-



factory. A few illustrative cases will be more interesting than a tiresome table of statistics:

(1) A woman, aged about 40, always underweight and nervous, had a stone in the ureter 3 years ago; passed under dilatation. A year ago, she broke down under heavy family and business responsibilities. Symptoms were loss of appetite and weight, insomnia, mental and physical languor. General examination showed only heightened reflexes. Twelve injections of sea water in 4 weeks. Results, in her own words: "Something has changed me. I eat and sleep better, can apply my mind to business, my muscles have some real action, and people notice the change in me."

(2) Man of 33, who had been treated a year for old syphilis discovered through an eye lesion. General examination and blood Wassermann negative. He had a laborious job and was falling down on it—"tired all the time". Twelve injections of sea water; bismuth treatment continued at the same time. Result: His foreman remarked that he was outdoing most of his fellow-workers.

(3) A thin, haggard janitress, aged about 35, near the end of a year's treatment for old syphilis. General examination and blood Wassermann negative. Too tired to carry on, nervous, slept poorly. Twelve injections of sea water; bismuth treatment meanwhile. Result: She gained several pounds, felt quite up to her work, and was complimented on her improved looks.

(4 and 5) Man and woman, both diabetics, in the sixties, with localized gangrene which did not improve much after the urine was made Benedict-negative and blood-sugar brought to near normal, until sea water was used. The woman, whose case was reported in 1929, had a relapse of sloughing when sea water was stopped, followed by complete healing after its resumption. On several occasions, each of these 2 patients had a chill after injection, and a rise of temperature which soon fell to normal.

(6) A well nourished man of 63, with chronic leg ulcers. Syphilis, diabetes and general arteriosclerosis excluded. Superficial veins slightly varicose. Three injections of sea water. Chill and slight fever after injection,

followed by marked increase of the hyperemic area around each ulcer.

Cases 1, 2 and 3 are representative of the indications followed and results obtained in most of the patients treated. Cases 4, 5 and 6 are the only ones, so far as I know, in which reactions occurred, and they were the only ones with active suppurative processes. Some patients feel a transient sense of warmth spreading over the body, during injection; which is said to be characteristic of magnesium salts used intravenously. About 50 injections, including some of those given cases 4 and 5, have been followed up for glycosuria, which has been produced experimentally in animals by injection of dilute sea water and of magnesium solutions. I have found no sugar as yet and, if I ever do, will still have to be convinced that its transient appearance means any tissue damage.

My work indicates that the intravenous injection of undiluted, pasteurized sea water, in quantities up to at least 30 c.c., is a reasonably safe procedure. It suggests that sea water, used this way, has a definite, though probably quite limited, application in therapeutics. It has been an inspiring experience to me, to have stumbled into a path of medical science leading away from overworked laboratories, drug factories and lamp factories, to the Mother of Life, the Sea.

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## FOREIGN BODY IN THE URINARY BLADDER

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Although foreign bodies in the urinary bladder occur commonly enough, the following case presents certain points which we believe are of sufficient interest to note. The female bladder is perhaps more frequently insulted than the male, in this respect, because of the short urethra in the female and the ease with which a foreign object may slip into

the bladder as compared with the longer and narrower urethra in the male.

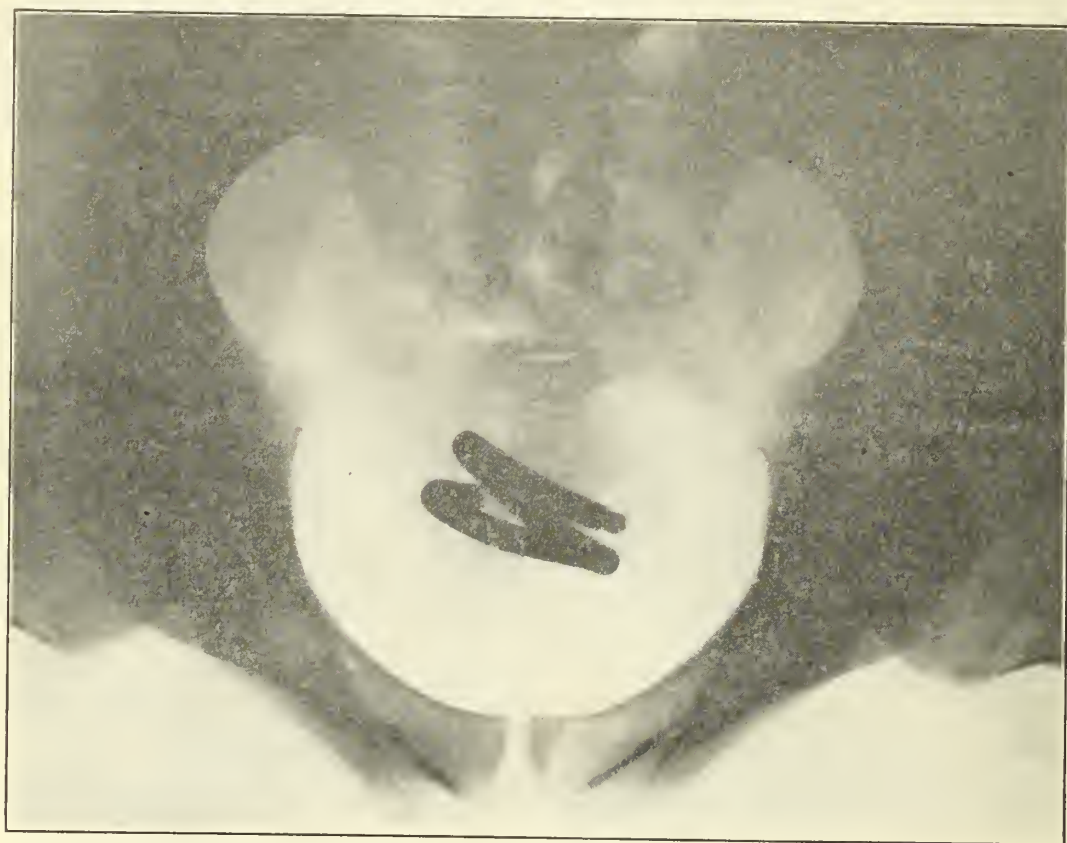
#### CASE REPORT

F. K., Polish, unmarried, aged 22, was referred to the genito-urinary department of the Alexian Brothers' Hospital by Dr. M. Holtzman, of Elizabeth, New Jersey.

*Complaint:* Difficulty in starting the stream and, at times, complete retention of urine. No history of venereal disease. He states that

thus irritating himself, the patient offered the following explanation. He had been ill, was having difficulty in urination, and decided to withdraw his urine by inserting the rubber tube. Questioned as to why he had not used a catheter, he revealed total ignorance of such an instrument. At no time would the patient admit any knowledge of the toy rubber balloon.

*Physical Examination:* The patient was obviously of low mentality. He was coöpera-



No. 1

Foreign Body in the Urinary Bladder

about 6 months ago he introduced a short length of rubber tubing into the urethra, and it slipped away from him and he was unable to extract it. At first there were no symptoms but gradually he noticed some frequency and burning, and then increasing difficulty in starting the stream, with occasional acute retention. On July 30, 1930, he was again seen by Dr. Holtzman, who referred him to the hospital urologic service.

On being questioned as to his motive in

tive but offered scant explanation for his self-abuse. Physical examination was essentially negative, except that there was some suprapubic tenderness on moderate palpation.

*Laboratory Findings:* Urine very dirty and loaded with pus and blood. Blood sugar, N.P.N., creatinin, and urea-nitrogen, all within normal limits. The blood picture presented nothing remarkable and the Wassermann test was negative. Radiogram revealed a rubber tube, as described by patient, lying coiled in



the bladder region; no x-ray evidence of the toy balloon. (Fig. 1.)

*Cystoscopy.* July 22, 1930. The bladder held approximately 100 c.c. Irrigating fluid was loaded with floating débris. Mucosa red and edematous, and the bladder wall thick and trabeculated; orifices obscure and the trigone injected. Free in the bladder, rested a rubber tube, folded and coiled on itself and covered with calcareous deposits. Attempts at cystoscopic removal were of no avail.

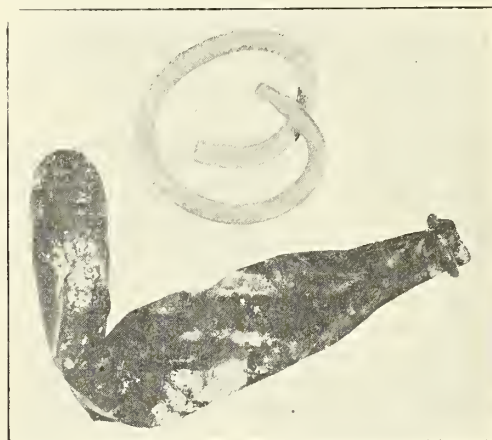
suprapubic catheter was removed on the seventh day, and a penile catheter inserted; removed 6 days later and 3 days after that the patient was discharged.

*Comment.* Practices involving bodily mutilation and calculated to give some measure of sexual stimulation are quite frequently brought to our attention. Often, but not always, there is evident mental deterioration. The foregoing case demonstrated unmistakable evidences of deficient mentality. At first



No. 2

Foreign Body in the Urinary Bladder



No. 3.

Foreign Body in the Urinary Bladder

*Operation.* July 25, 1930. Under ethylene anesthesia, a suprapubic midline incision was made, the bladder exposed, and opened in the conventional fashion. Lying free in the bladder could be seen a rubber balloon and within it the short length of rubber tubing. This was removed, the bladder closed around a Pezzer catheter, a drain was placed in the space of Retzius, and the wound closed. (Figs. 2 and 3.)

Convalescence was entirely uneventful. The

the patient tried masturbation with the short length of rubber tubing, but this proved very irritating to the mucous membrane of the urethra, and balloon was then used as a receptacle for the rubber tube and the whole inserted into the urethra. Masturbation could then be encompassed without irritating the mucous membrane. This went on until the apparatus slipped completely into the urethra, could not be retrieved, and brought the patient to the attention of his physician.

## Collateral Reading

### REAL AND UNREAL

Nearly everyone is at present interested in psychology, psycho-analysis and kindred matters, and many of the recent novels, as well as the biographies, have their reason for existence in this field of study. A good review, by Arthur Ruhl, of a new book entitled "Real and Unreal", appeared in the Saturday Review of Literature of June 13; which review we herewith reproduce because it indicates that you may find the book entertaining during your vacation hours.

Boris Sokoloff is a Russian biologist who also writes. His "Crime of Dr. Garine", a collection of short stories, appeared a few years ago while he was associated with the Rockefeller Institute in New York. Before coming to this country, he had been a member of the Institute of Science in St. Petersburg and had had experience as an experimental biologist. To his experiments in fiction, therefore, he brings a scientific point of view and a knowledge esoteric to the average reader or writer.

This curious knowledge, and the cold, analytic gaze which accompanies it, inevitably intrigues. I am not sure that they do not make Mr. Sokoloff's work seem more profound than it really is—not certain, that is to say, just how much the reader's tendency to read into his narrative significances beyond those of the every-day novel is based on the actual presence of such significance and how much it may be explained by the author's peculiarities of style and his somewhat obscure manner of telling his story.

His purpose, as I understand it, in "Death of Simon", is to make a study, in fictional form, of a certain type of divided personality, of a man suffering from a disturbance of the endocrine glands. In Dr. Simon, the thyroid and suprarenal glands are functioning abnormally. He is extremely sensitive, nervous, emotional; acutely impressionable, and seems to see, in visions, what has been stamped on his subconscious mind. In actual life, he inclines to avoid the crowd and the commoner emotions, and to lose himself in an austere world, peopled with flowers, the chiming of church bells, and beautiful dreams. He is of the type of the religious visionary. To remain in this more or less dream world, he inclines to suppress sex and the more earthly instincts, a suppression which only heightens the sensitiveness of the other side of his personality.

In the story he commits a murder—as the law conventionally interprets the facts of the

victim's death—and part of the author's purpose is to show that the supposed criminal in such a case may be morally guiltless; that he should be cured rather than punished. There are, moreover, 2 women, who embody what might be called Dr. Simon's notion of "sacred" and "profane" love. I find Mr. Sokoloff's handling of these women a little difficult to follow but, as I understand the story, Dr. Simon's final discovery of a safe harbor in Gertrude's arms is intended to show the return of his tortured personality to a normal balance; to a humanity which recognizes and accepts the so-called "baser" instincts, understands, and forgives. Dr. Simon's "death", as I understand it, is the death of that overwrought and unbalanced personality which he had cultivated during the earlier years of his life.

There is a suggestion of Dostoevsky in Mr. Sokoloff's work—not in manner or in narrative skill—but in the type of human being considered. What Mr. Sokoloff does, in effect, is to take such a character as Dostoevsky might have written about and endeavor to analyze it, in fictional form, from the modern biologist's point of view. His story is not altogether easy to read—the narrative jumps about, this way and that, is full of curious elisions. But it is, nevertheless, peculiarly interesting, and becomes the more so on second reading.

## SEPTEMBER

These days a boy will dart and dream  
Like a speckled trout in an amber stream,  
A girl walk lighter than yellow leaves,  
And talk like rain in the brimming eaves;  
But a woman will sit by an old gray wall,  
Thinking of orchards ripe in the fall,  
Or maybe of nothing, nothing at all.

There she'll sit and never stir  
Till understanding touches her,  
Or a warm wind wanders from the town,  
And a great gold pear comes tumbling down.  
Still she'll only sit and stare  
At the precious fruit and the empty air,  
Praising God for a single pear.

Honey-mellow and sunny-sweet,  
Beautiful fruit is meant to eat.  
Let her hold it a little while,  
Touch it softly, and softly smile.  
She will offer it with a sigh  
To the boy or girl who happens by,  
And sit in the sun, and wonder why!

—Rosalie Hickler.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

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## WORKMAN'S COMPENSATION LAW

In his Presidential Address, Dr. Sommer stated that in visiting county society meetings he had heard much discussion of the Workman's Compensation Law, and many complaints about the manner in which it is enforced; complaints ranging over a wide field and covering a variety of subjects—from the small fees paid by some insurance companies to the "lifting of cases" by fellow practitioners. His recommendation, that a committee be appointed to study the whole problem, was approved by the House of Delegates. President Hagerty has secured Dr. Sommer's consent to serve as Chairman of such a committee, and has given him as committee associates, Drs. Francis R. Haussling, Joseph H. Londrigan, I. M. Vanderhoff, Elmer P. Weigel, David A. Kraker, and James P. Morrill.

At the same time this committee is conducting its investigation, we have the advantage of Dr. Morrison's presence on the Advisory Board that the Commissioner of Labor appointed last year, and whose preliminary report was published in the May Journal.

It should also be remembered that Dr. Morrison, in his Annual Report, as Secretary, invited all members who have suggestions to offer, for amendments to the law or for better administration of the existing law, to communicate with him before October. So, those who desire to present criticisms of, or plans for improving, existing conditions may,

and should, now address themselves to Dr. Morrison or Dr. Sommer, or to some member of the above named committee.

## NEWSPAPER PUBLICITY

Thousands of physicians, all over the world, serve humanity by devotion to public health work and die in office or pass along to the "retired" list on account of age, or political displacement, without any public notice being given to their many years of labor or excellence of service in the interest of human welfare. The work of physicians so engaged is peculiarly thankless. Their salaries are low, even in comparison with the pay of other public servants. They are seldom thanked specifically, because what is everybody's business is nobody's; and their names, even, pass into oblivion with little more mention than is to be found in the official record of appointment of their successors.

Recently, our attention was attracted, perhaps because of its unusual character, to a letter in the London Times, of Saturday, August 8, signed by 6 of the most distinguished English physicians and surgeons, as follows:

### A TRIBUTE TO DR. T. H. C. STEVENSON

To the Editor of the Times:

Sir.—We do not wish the retirement of Dr. T. H. C. Stevenson from his official work at the General Register Office to pass without an expression of our deep regret on the event, and of our appreciation of his public services.

Of Dr. Stevenson's contributions to the scientific journals we shall say nothing, except that these would have sufficed to secure a permanent place for him in the history of statistical science. The searching and illuminating discussions of the problems of vital statistics, which he has contributed to the Census Reports and to the Annual and Decennial Reports of the Registrar-General, have formed noteworthy landmarks in the study of our national records. Dr. Stevenson's remarkable analysis of the data of the census of fertility taken in 1911 was a *tour de force*, while the essays contributed by him to the Annual Reports of the Registrar-General make a wider appeal and, in our judgment, place Stevenson second only to William Farr among those public servants who have secured for England her proud position in the realm of official vital statistics. His studies of the factors of infant mortality, of the local distribution and evolution in time of mortality from tuberculosis, and of the interpretation of the statistics of cancer mortality, especially in relation to its local incidence in the human body, are further examples of immensely important medical research. Dr. Stevenson first demonstrated, upon adequate data, the contrasting rates of mortality of single and married women from cancer of the breast and reproductive organs; this, and his more recent studies of the variation of cancer mortality with social status, constitute probably the most important statistical contributions yet made to our knowledge of malignant disease.

In these, as in many other instances, Dr. Stevenson proved himself a worthy successor to Farr, and there has been secured that continuity of research into medicosocial problems of which the Registrar-General's records form an almost unlimited storehouse. We offer this imperfect tribute to the merits of a great public servant in the hope that our readers may reward him in the way he would most value—by studying these records of first-rate investigation for themselves and by becoming stimulated to similar inquiries based on our scantily used records.

We are respectfully,

Dawson of Penn  
Moynihan  
J. C. Stamp  
Arthur Newsholme  
Major Greenwood  
G. Udny Yule

We reproduce the above letter because it appealed to us as an example of what physicians can do in the line of public acknowledgment and appreciation of the work of professional associates, and of what they might, in perfectly good taste, regularly do toward informing the laity regarding the constant and continuous public health protection being given by physicians. To us, it appears to constitute an example worthy of adoption—a method applicable to our public educational program, and usable, too, as an offset to some of the existing tendencies to criticize the medical profession in unreasonable ways.

Furthermore, this is a form of publicity not

subject to criticism on the score of ethics—it is, rather, deserving of praise; hence, we commend it to the consideration of those—especially county medical society officers—who advocate wider use of newspapers, by organized medicine, for publicity. Opportunities for such public recognition of the work of our confrères are not infrequent, and we might well use state and county papers for complimenting those physicians who have done or are doing good service, and for better acquainting the people concerning what is being done in their behalf.

## REVISION OF PUBLIC HEALTH LAWS

The preceding editorial brought to mind an excellent example of a missed opportunity to praise publicly the good deeds of one of our members, and to instruct the laity further regarding such matters.

About 3 years ago, Dr. Costill, after a period of most praiseworthy service to the state as Director of Public Health, was incontinently thrown out of office; we not only made no protest against using that office as a political football but neglected to express publicly our professional approval and appreciation of his fine work.

Just recently, another change has been made in the State Department of Health; despite the fact that Director Bowen has proved himself a very capable and efficient officer, he has been disposed of as was his predecessor. In so far as we are aware, no public announcement has been made in either instance by way of explaining these changes. We have no complaint to make regarding the recently appointed Director; for all we know at this moment, he may be an ideal man for the place. But, we dislike the procedure, or method, employed in the making and breaking of such an important official as the Director of Public Health in New Jersey.

During his incumbency of the office, Dr. Costill frequently recommended changes in the existing health laws, and Mr. Bowen, in an address to the State Medical Society at the



Annual Meeting in 1930, also set forth the desirability of a fairly complete revision and asked whether the medical profession would join in an effort to procure it. Unfortunately, there was no discussion of the symposium of which Bowen's address was a part, and no authoritative answer was ever given to his question. However, at the recent Annual Meeting, provision was made for a special Committee "to confer with the State Board of Health, and other public health authorities, on Revision of the State's Health Laws". President Hagerty has named an excellent Committee—chosen with great care—under the chairmanship of Dr. William G. Schaufliker, of Princeton; and the following additional members: Drs. Joseph C. Schapiro, of Union City; Stanley H. Nichols, of Long Branch; Frank C. Johnson, of New Brunswick; and Julius Levy, of Newark. It is hoped that this group will endeavor to bring about several greatly needed improvements.

The first essential is, of course, to effect such alterations as will best safeguard the health of all residents of the state; i. e., public welfare must be the committee's prime consideration. This society long ago constituted itself guardian of the people in all health matters, and it fully intends to maintain that position. In order to meet its obligations it must, however, be given a larger part in the control of health affairs. So, for our committee, that becomes the second important factor in the developments of the proposed conference. At present we have nothing like adequate representation on the Board and, further, we respectfully suggest that it should be a legal requirement that the Director, or Commissioner, must be a *physician*. We recognize the fact that on occasion the office has been well conducted by a layman, and realize also that some of the best City Health Officers in this state are not doctors of medicine, but such facts have been too greatly dependent upon chance. In general, it would probably prove wiser to require that a physician be chosen for head of a state department whose work is so preëminently medical.

## Travel Article

### A VISIT TO THE ROYAL VICTORIA HOSPITAL, MONTREAL

(A letter from John Hammond Bradshaw, M.D., F.A.C.S., Orange, New Jersey.)

No medical man stopping at Montreal should fail to visit the Royal Victoria Hospital. I have said before that hospitals are like people, different only outside but much the same *inside*. For a more unique and beautiful exterior with a more unusual setting one will travel a long way and visit many cities and many countries before such a hospital as the Royal Victoria will be seen. Like Rome, Montreal is a city of many hills; but no other city in the world has Mount Royal towering many hundreds of feet above the city's noise and grime.

Now, picture to yourself a hospital on a mountain, built of gray rock, consisting of 10 or more large bulidings of Norman architecture surrounded by densely wooded slopes of old forest trees and looking down quietly (like a guardian angel) upon the city of Montreal far below at its feet, a city of between one and two million souls.

The Royal Victoria is not the only large hospital in Montreal. The Montreal General, I believe, is larger, but it holds about the same relation to the Victoria as the London Hospital does to St. Thomas' Hospital on the Thames Embankment. The Montreal General is built low down in the heart of the poorer quarter of the city and is not as modern as the Victoria. But within the walls of the Montreal General work many of Canada's most noted medical and surgical men. Moreover, if one motors a short distance from the city, one will pass a pure French Canadian Hospital whose very sign will make one gasp. The doctors who are working in this institution, I am told, take nobody's dust.

Montreal (named after Mount Royal by Champlain), the greatest city of Canada, whose site was discovered but 50 years after Columbus discovered America, is also one of the oldest, and is the Mecca for many pilgrimages seeking medical and surgical relief, not only for Eastern Canada but, I am told, for thousands of people living in our own United States, particularly those living in the northern counties bordering on this His Majesty's principal great Dominion. The Montreal hospitals "*deliver the goods*" and the fees for medical and surgical work are most reasonable. Even the nursing costs but

two-thirds of the cost of nursing in New York City and its vicinity.

This hospital is not, like St. Bartholomew's in London, an ancient one. It only dates back to the end of the last century. It was organized and founded with great vision by the Right Honorable Lord Mount Stephen and the Right Honorable Lord Strathcona and Mount Royal. On its present Board of Governors we find such names as the Mayor of Montreal, the President of the Board of Trade, the President of the Bank of Montreal, E. W. Beatty, K. C., the President of the Canadian Pacific Railway Company, the President of the Canadian National Railways, the President and Dean of McGill University, as well as other well known names. One can readily understand the wisdom and the foresight of getting such people interested in a hospital. This idea, I believe, is a good one for many of our own institutions to adopt. Just run your eye again over these names, and try to imagine the *full scope* of their influence! You may say these men's names are only "window dressing", but I am told that this is not so and that Beatty, who controls what is probably the greatest system of railways, hotels and steamships in the whole world (the Canadian Pacific), gives to the Royal Victoria Hospital freely much of his time and great administrative talents.

As one enters the principal entrance, one first sees a very beautiful life-size marble statue of good Queen Victoria holding in her sheltering arms 2 little children. There are so many buildings to see, one is at a loss which way to turn. As the hospital is built on a cliff of a mountain, almost all of these hospital buildings are connected with one another by long, well-lighted tunnels. I first went to the operating rooms (there are 10 of them in the institution). These are built in the approved fashion of the year 1900, with walls lined with 3x5 slabs of white marble. As the hospital is part of McGill University Medical School, there are amphitheatres of large seating capacity in a number of these rooms. Here work E. W. Archibald, B.A., M.D., F.A.C.S., F.R.C.S.; C. B. Keenan, D.S.O., M.D., F.A.C.S.; F. C. McKenty, M.D., F.R.C.S., F.A.C.S.; Francis A. C. Scrimger, V.C., B.A., M.D., F.A.C.S.; Wilder G. Penfield, Litt. B. (Princeton), M.D. (Johns Hopkins), M. A., B. Sc. (Oxon), one of America's greatest brain surgeons; D. W. MacKenzie, B.A., M.D., F.A.C.S., who is so well known in the urologic world; J. R. Frazer, M.D., F.A.C.S., one of Canada's great gynecologists; and many others who are leaving their surgical

footprints on the North American Continent. As there are about 50 doctors on the House Staff alone, one sees the impossibility of giving all the names.

I witnessed a number of urologic operations and an operation for a comminuted fracture of the leg. This was skilfully and very quickly performed by cutting down to the different fragments and suturing them with heavy chronic catgut to the tibia. Approximation was perfect and the wound closed and leg put in plaster cast. Dr. Scrimger is one of the most active surgeons here, and is most highly regarded. He was just completing a most critical and difficult job on a poor fellow, the victim of an aeroplane smash (it was a decided human smash as well!). The skull and other bones required work. I had a long talk with this surgeon, who explained in detail why in such a case he still uses Lane plates. His arguments, back up by the detail of the results in other cases, were sound. I am aware that certain New York surgeons would froth at the mouth, but personally I myself believe that Lane plates still have their uses. Dr. Scrimger, let me say in passing, won his Victoria Cross in the World War. Picric acid seemed to be the favorite skin antiseptic in the work I witnessed. I never saw more than 2 nurses work in each operating room, but they are well trained.

Before closing this long letter, I should like to give a few facts and figures regarding the Royal Victoria Hospital. During the past year the patients aggregated 14,597. The operating deficit for the year was \$19,661.66, "*which under the present conditions may be regarded as satisfactory*". (I myself have italicized this last clause.) The average cost a day per patient in private rooms is \$6+ and in wards \$4+. Year by year there is an endeavor to shorten each patient's stay in the hospital, and in this they are succeeding, thus reducing cost.

The maternity department is very fine. Total confinements last year, 2412; deaths 16; mortality about .6; forceps used 390 times; cesarean sections 53—1 death.

The Social Service, Prenatal, a "Department of Nutrition", the Radium and X-Ray Services are well equipped and most active and efficient. The gynecologic department is almost as active as the general surgical. The medical department is under J. C. Meakins, M.D., LL.D. (Edinburgh), F.A.C.P., F.R.C.P. (C.), F.R.C.P. (Edinburgh), F.S.S.C., F.R.S.E., and should be visited to be appreciated.



## Medical Ethics

### "C'EST FORMINABLE L'OPINION PUBLIQUE."

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, New Jersey

One may believe it or not, but this caption is accurate. If anyone has the slightest doubt as to its truth, let him perform some outré act *and get found out!* He may not be immediately aware of any change in public opinion and, like many of the wicked, he will seem to flourish like the green bay tree for a long time, but at last disaster, like an avenging Nemesis, will one day overtake him. This seems to be one of the laws that puny man, with all his pride, his assurance or his wealth, cannot escape.

One often proudly thinks he can mold public opinion. One also knows that public opinion changes; it is different in different centuries and in different lands. It is also different in different strata of society.

To a doctor, this subject has an especial significance. In many communities no fiercer light beats upon any throne than upon a doctor's comings and goings, his pronouncements, and even upon his manner of life. Of course this is quite flattering to his self-esteem. It also has its disadvantages. He often finds that he is handicapped in his wishes. Mr. Rich seems to be able to do almost anything (even to skating on thin ice) and get away with it. Does he not still pass the plate in his fashionable church? Why do his financial operations always have a golden glow? It is often discouraging to the plodders and to the poor who try to walk a straight and chalky line.

But, if virtue is its own reward, it is not its *only* recompense. To those of us who have lived a few years there is a world of satisfaction in the belief that right will prevail *in the long run*, for we have seen it.

We cannot afford to offend public opinion. *It costs too much to do it!* We can think of many a righteous man who deluded himself that it could be done. We admire Judge Ben Lindsey for much of his work that is great and good, but would we like to change places with him today? He is not singular. There are also many, many others. Perhaps in a few decades we will say Judge Lindsey was right and we were wrong.

But it is the public opinion of today to

which this caption refers, and we still are living today, and today is in the year of our Lord 1931.

## Esthetics

### THE WINDMILL ORCHESTRA CONDUCTOR

Having received practically no musical education, and being never the less very fond of music, especially that of a good orchestra, we have often wondered to what extent the labors—or gymnastics—of an orchestra leader were really necessary. The Literary Digest of June 27 provided the answer in an article abstracted from The American Weekly (date not given) of New York. For the benefit of colleagues of equal ignorance concerning music we reproduce a portion of that article.

Orchestral conductors are of various kinds. Some are so acrobatic that trouble on occasion overtakes them. Such a one was a famous English conductor in New York, who broke his suspenders, and only averted disaster by strategy. Richard Strauss, the famous Austrian composer and leader, is one of the quiet ones, and he has been quoted as saying that "the antics of the spectacular, modern orchestra leader are not only stage play and unnecessary, but a poor compliment to the members of his orchestra".

"Nobody doubts that every attitude and motion is vitally necessary, and that without this superman on the raised pedestal—well, nobody knows what an awful mess and mix-up that 30 or 40 or 50 or 95 men would get into. One would think they were a lot of musical Bolsheviks held in order only by this 1 musical dictator, who sinks down perspiring and exhausted at the end of his victorious struggle. The joke is that when these same men are rehearsed in the privacy of the band-room, their leader does none of these gymnastics until they are all set; and only then, when it won't upset his musicians, does he rehearse his own part of the show.

Not knowing this, the audience is convinced that if this genius with a baton didn't toss his fevered brow in the air and flash that appealing look, the kettle-drums would not come in when they should; and if it were not for that splendid lion-like shake of the long-haired head and the commanding gesture, like a traffic policeman preventing a charging

truck from crushing a fallen child, they would keep right on and ruin the piece."

"In a recent editorial comment on the Strauss statement it was asked: 'Don't they really know when to play loudly or softly or when to come in?' As a matter of fact, they know perfectly well, and it is all written down for them on the music sheets in front of their faces. Any one who didn't know that much would hardly belong to a first-class orchestra. Probably only a band of amateurs would be helped by these cheer-leader, jumping-jack tactics."

"A trumpeter sitting far over on the right of the stage, with 3 trombones and a lot of drums behind him, has difficulty in hearing the first violins, some 30 feet away. At any time he may need a cue from some one in the center of things, but the lifting of a finger is enough. The music does not have to be jerked out of him by force. Nor does he require what looks like a threat of violence in order to stop at the right time. A hint would be sufficient.

Until the end of the last century the orchestra conductor usually did little more than give time signals, and was not a highly paid or featured performer. Also there was little pretense on his part of interpretation. In those days the feature was some eminent soloist who gave the interviews, received the advertising, and brought the crowds. How insignificant leaders were at that time, and how it astonished the players when the public began to give the time-beaters credit for results, is shown by the remarks of Pablo Sabasate, some 30 years ago. This violinist is recorded as having said:

"What do you think! They don't play at all. They just go around with a little stick and wave it over the orchestra, and they get paid for it. The public seems to be getting the impression that these fellows actually make us musicians play."

That a conductor can do almost anything, no matter how startling and unexpected, and rely upon his musicians to carry on, is revealed by the curious accidents that befell Sir Thomas Beecham, the celebrated English conductor who was alluded to at the beginning:

"At Philadelphia, in his antics on the platform, he managed to sprain an ankle, which cramped his activities, because he had to stand still and carry his weight on one foot, and in later performances he kept the injured one

on a pillow, but the concerts were a great success. In New York, conducting the Philharmonic, he suffered another casualty. So furious were his exertions in wrenching the music from the musicians that his suspenders broke under the strain, and he almost lost his trousers. This was even worse than a sprained ankle, because it kept both legs together, and most of the time one hand in a trousers' pocket. In emergencies, when he felt it necessary to wave both hands, this gesture was instantly followed by a frantic clutch at his waist. In spite of these cruel handicaps, the audience cheered. It was his greatest American triumph."

Two conductors, familiar to American audiences, Toscanini and Stokowski, are cited among the temperaments:

"The great Toscanini hit an offending violinist over the head with his baton. The violinist saw the blow coming and tried to ward it off with his bow. But the bow broke and the blow landed. Worse than that, a splinter injured the fiddler's eye, and he brought suit for damages. A psychologist testified that to such a temperamental artist as Toscanini hearing a violinist play flat was enough to unseat his reason for the moment. He would be filled with a blind impulse to silence the offender in the quickest possible manner, and therefore must not be held accountable. Had it been the case of a boss and a workingman, this theory might not have impressed the court. But it happened in Italy before a judge and a jury of musicians. It would be difficult to get native Italians who are not musical experts, and their faces hardened when they heard that the injured man had played flat.

Leopold Stokowski, conductor of the Philadelphia Orchestra, is the outstanding showman among conductors in this country. He is widely known for his unorthodox methods, particularly his precipitate entrance from the wings to the conductor's platform, and the suddenness with which he launches the music. Before he gets both feet on the stand his baton has swung down, the lights in the auditorium are dimmed, and the concert is in full swing.

Stokowski undoubtedly is a talented conductor, but many of his original methods of staging a concert are done to impress the audience. They do not increase the respect and coöperation of the musicians working under his baton."



## In Lighter Vein

### Turn It Inside Out

Mr. Kangaroo—"But, Mary, where's the child?"  
Mrs. Kangaroo—"Good heavens! I've had my pocket picked."—Christian Advocate.

### Pampering Junior

"What did you give baby for his first birthday?"  
"We opened his money-box and bought the little darling a lovely electric iron."—Sydney Bulletin.

### See the Folks First

Tommy—"Mother, let me go to the zoo to see the monkeys?"

Mother—"Why, Tommy, what an idea! Imagine wanting to go to see the monkeys when your Aunt Betsy is here."—Lever.

### True Service

Mary had a little lamb,  
Her father shot it dead,  
And now it goes to school with her  
Between two chunks of bread.  
—Boston Transcript.

### Playing Safe

Feminine Voice (telephoning): "Is my husband at the club?"

Porter: "No ma'am."

Feminine Voice: "But I haven't told you who I am."

Porter: "Ah knows dat, lady, but they ain't nobody's husband heah nevah."

A new magazine is published by and for lunatics. It is unique only in admitting the fact.—Flor-  
ence (Ala.) Herald.

"Ink can be put to many good uses", states a scientist. Some one should tell those spring poets.  
—Passing Show (London).

Some take a spring tonic for that run-down feeling, but pedestrians need a stretcher.—Flor-  
ence Herald.

The sap is an indication of vigor in all trees except family trees.—Louisville Times.

### Not Half Stripped

During the hearing of a case, the Judge was disturbed by a youth who kept moving about in the rear of the court.

"Young man", he explained, "you are making a good deal of unnecessary noise. What are you doing?"

"I have lost my overcoat and am trying to find it", replied the offender.

"Well", said the Judge, "people often lose whole suits in here without all that fuss."—Philadelphia Public Ledger.

## Lighthouse Observations

### PRACTICAL USE OF SPINAL ANESTHESIA

When the Fifth Judicial District Meeting was held in Atlantic City, April 10, 1931, there was exhibited an excellent moving picture which demonstrated the technic of spinal anesthesia and illustrated some of the uses of that form of anesthesia. There is no question but that spinal anesthesia is now being more widely employed than was dreamed of even 2 or 3 years ago, and at the same time we mention the increasing number of surgeons employing spinal anesthesia, and its expanding field of application, we can note its progressive conquest of individual operators. For instance, V. Earl Johnson, one of our own state society members, in the American Journal of Surgery (March 1931, p. 478), relates his personal experience and tells how he and his hospital associates were gradually convinced of the usefulness and advantages of spinal anesthesia.

"When I began the use of spinal anesthesia in January 1928, it was because its use was a necessity, the case being a fractured femur in a person with advanced prostatic obstruction, requiring an open operation. I ran up against a rather firm opposition to its use in our hospital. It was made a subject of discussion and the question came up as to whether I would be allowed to use it there. At the present time, however, the attitude is changed to the extent that I have been requested to give spinal anesthesia for every surgical chief on the hospital staff, and on the genito-urinary service it is the routine method. From an almost absolute condemnation of the procedure, it has come to be very openly accepted.

During the time I have been using spinal anesthesia I have come to some very definite conclusions, to wit:

(1) Spinal anesthesia is a method that has come to stay. It is safe when used in properly selected cases.

(2) It should not be given by anyone but an expert. I do not subscribe to the opinion held by some that spinal anesthesia may be administered by anyone who can do a lumbar puncture.

(3) Spinal anesthesia is an ideal anesthesia for the following conditions: (a) intestinal obstructions of all forms; (b) obstructions of the lower urinary tract: prostatic hypertrophy, stricture of the posterior urethra, subcervical nodes, etc.; (c) urinary extravasations with toxemia; (d) major amputations of the lower extremities; (e) for surgery of diabetics; (f) for surgery below the diaphragm in patients suffering from pulmonary tuberculosis; (g) for surgery in certain heart and kidney diseases; (h) for those cases of acute abdominal conditions where there is a question of pneumonia.

(4) Spinal anesthesia, while not absolutely indicated, has special usefulness in the following conditions: (a) treatment of fractures of the lower extremities; (b) rectal work of all types; (c) perineal and vaginal operations; (d) intraabdominal surgery of the female reproductive organs; (e) any operative procedure below the diaphragm, requiring as much as 1½ hours to complete—shock is eliminated; (f) ruptured duodenal or gastric ulcers.

(5) I do not believe that the ordinary run of operations of the upper abdomen on good risk patients can be done with a greater degree of safety under spinal anesthesia than with ether or

gas-local combination. If the patient is a poor risk, because of associated damage to heart (q. v.), lungs, or kidneys, or if the patient is diabetic, the safer method is spinal anesthesia.

(6) Postoperative complications are markedly reduced. In this series there were no respiratory complications. One patient developed gastric dilation, from which recovery was rapid.

(7) The mortality rate for bad risk cases is markedly reduced. All deaths occurred as a result of the primary surgical condition. On the genito-urinary service the death rate is now only 3%, and the majority of the cases operated upon are prostatic cases. The deaths on this service are mostly advanced urinary extravasation cases. Only one prostatic patient died and that was due to suppurative peritonitis.

There are actually very few contraindications to the use of spinal anesthesia. They are tabulated as follows:

(1) Infections, including ordinary pustule (pimple), at the site of the puncture.

(2) Very low blood pressure. One must be very cautious in its use if the systolic pressure is below 100.

(3) Septicemia cases.

(4) Consensus of opinion is that operations above the diaphragm are more safely performed under other forms of anesthesia.

(5) Cardiovascular: decompensated cardiac muscle, Stokes-Adams' disease, inordinately high pulse pressure (relative).

(6) Cerebrospinal: (a) tuberculosis; (b) syphilis; (c) brain tumor; (d) cord tumor; (e) meningitis—any type; (f) turbid spinal fluid.

## MENTAL HYGIENE AND INDUSTRY

In last month's Journal we dealt in this column with Mental Hygiene and the Child. It seems now appropriate to reproduce the following editorial from the Pennsylvania Medical Journal of June:

"Industrial management or personnel administration is that phase of industrial or mercantile management which concerns itself mainly with the human factor. The problems which present themselves are innumerable and affect many phases of human activity. The mere effort of getting a living is a fertile source of maladjustment. The major portion of our population belongs to the industrial class. Therefore, anything that can be done to assist the worker to adjust himself effectively to himself, the job, his home, and to his social environment, is more than a contribution to the employer and to the individual. It is a contribution to the health and happiness of the community as a whole.

Industrial medicine and hygiene have demonstrated their right to a place in the field of industry. The mental health of employees increasingly demands attention of the industrial physician, business executives, and personnel staff. The agitator, the chronic groucher, the eccentric, the job misfit, and the man who fails are not merely candidates for job transfer or the blue slip. The choice of executives, job placements, guidance of young workers, selection of machine operators and automobile drivers are no longer matters of hunch and intuition. These are matters for careful study. It is in dealing with these broad problems of personnel selection, the maladjusted, grievances, the physical and mental causes of accidents, that psychiatry makes its contribution to the industrial field.

Although mental hygiene as applied to industry

is in many respects still in the experimental stage, certain definite trends have been established in which the psychiatrist, the psychologist, the psychiatric social worker, all play their parts. Psychologic tests in the hands of trained psychologists constitute a means of measuring certain achievements, performances, capacities, and behavior patterns under standard conditions. The psychiatric social worker enters the industrial field to study those problems which concern the life of the worker outside of his industrial contacts, and to cooperate with the management in carrying out the suggestions made by the psychiatrist or those involved in the personnel management. The psychiatrist has by training and experience acquired a deep understanding of the mental processes of both the mentally sick and the supposedly normal individual. He readily detects the psychotic, the mentally defective, and the frankly psychoneurotic. But he is equally keen to recognize and give serious consideration to those prejudices, fears, worries, anxiety states, depressions, pessimistic moods, hatreds, jealousies, grievances, and unhealthy mental preoccupations and attitudes to which may be attributed a large proportion of work failures, maladjustment, and social discontent. He sees the unhealthy mental condition. But he also takes into account and weighs the whole situation, the man's inherent abilities, his environment at the plant and at home, the economic and the social factors. Dealing with the workers, their individual and group problems, the psychiatrist is in a position to know the minds of the executives and the workers, to see their problems and their grievances, and to foster mutual understanding, happiness, cooperation, and a spirit of loyalty among workers, management, and employer. This working team of psychiatrist, psychologist, and psychiatrically trained social worker brings to those problems the psychiatric or clinical point of view—that point of view which emphasizes all the factors in a given case, the physical, the mental, and the social, thereby contributing to the solution of these problems all the resources that modern medicine, psychology and social work have to offer."

## Public Relations

### MALE PROSTITUTE CONVICTED

(From Public Health News, Trenton, issue of June-July, 1931.)

The first man to be convicted as a prostitute and sentenced to a penal institution in New Jersey was recently removed to the Rahway Reformatory from Paterson.

It is not unusual for women to be arrested on charges of prostitution and sentenced to state institutions. However, the success of Mrs. N. A. Wickes, the protective officer of the Paterson health department, in having a similar procedure followed in the case of a male prostitute, deserves special mention.

The man in question first came to the attention of the health department in 1920 when infected with gonorrhea. He promised to take treatment from his own doctor but failed to do so and evaded discovery for some time. Later he married a girl who became a prostitute and was twice sentenced to Clinton Farms.

During the 10 years after the man's first contact with the Paterson clinic, several women who came to the attention of the protective officer



named him the father of their illegitimate children and charges of bastardy were preferred against him. By moving about from place to place, and through legal technicalities, he was able to escape punishment, however.

In November, 1930, this man was named the source of infection of a syphilitic infection in a report received by the State Department of Health. When notified of this fact, the health officer of Paterson had an investigation made and appealed to the county prosecutor, calling attention to the man's long career of promiscuity. As a result, the offender was arrested under authority of Chapter 240 of the Laws of 1922, charged with being a prostitute, was convicted and sentenced.

## CONSULTATION SERVICE AT MOUNT SINAI HOSPITAL FOR PEOPLE OF MODERATE MEANS

(From the New York Medical Week, July 11, 1931)

### AIMS

A "Consultation Service", restricted to patients of moderate means referred by their family physicians, is to be established by members of the Medical Staff of the Mount Sinai Hospital in coöperation with the Administration of the Hospital. The "Service" is designed as an aid to physicians of the community in the investigation of patients with clinically obscure conditions requiring multiple consultations and laboratory examinations in order to establish a diagnosis.

The Service is based upon the conviction that public interest requires preservation of the family physician, and that the full advantage of competent medical care can best be achieved under his continuous guidance—but that in order to accomplish this he must be provided with complete and easily available diagnostic facilities to supplement his own resources.

### ELIGIBILITY

As the aim of this Service is to coöperate with practitioners in the medical care of people of limited means, the economic level of eligibility is to be a maximum income of \$2400 a year for unmarried individuals and \$400 for total family income. For families of more than 5 members an extra allowance of \$400 will be added for each additional dependent. Physicians are requested to refer only patients who fall within this economic group. Patients will be expected to give satisfactory information concerning salaries or other income, rent, and the names of employer and landlord.

### STAFF

The staff of the Consultation Service will be comprised of internists, surgeons and specialists who are members of the Visiting Staff of the Hospital.

### SITE

The Service will function as an independent, detached unit of Mount Sinai Hospital and will occupy space in the hospital's new building at 1 East 100th Street, New York City.

### FEE

Tentatively, a flat fee of \$35 will be charged all patients regardless of the nature of illness or number of consultations or laboratory examinations that may be required. To avoid interference with the practice of individual consultants, the fee

for a comprehensive examination is purposely set at about double the average charge to a patient of this class for an individual consultation or major laboratory examination. An effort will be made to maintain a flat fee schedule in preference to a sliding scale. The Mount Sinai Hospital obligates itself not to derive any profit directly or indirectly, from its participation in this project.

### FAMILY PHYSICIAN

Patients will be seen only by appointment made through their physicians, who are urged to accompany them whenever possible. Members of the Service Staff will maintain the ethical relationship of consultants.

### CONSULTATION HOURS

The consultation hours will be Tuesday, Thursday and Saturday from 1.30 to 4 p. m. A secretary will be in attendance at all times, however, with whom appointments may be made in advance by telephoning.

### CRITICISMS PREVIOUSLY RAISED

Diagnostic clinics heretofore established have met with one or more of the following criticisms:

(1) The clinics accept patients who are not referred by physicians, carry out all forms of therapy and thus practice medicine in competition with the family practitioner.

(2) Clinics are manned by physicians who do not possess adequate scientific training and clinical experience.

(3) Some diagnostic clinics are merely part of a general public dispensary and the primary principle, to keep the patient in the hands of his physician, is in conflict with the function of the public dispensary which takes over the complete management of the poor patient.

### THE MOUNT SINAI PLAN

The Mount Sinai Consultation Service is being organized, staffed and administered by internists, surgeons and specialists who are members of the visiting staff of the hospital.

No patients will be accepted unless referred by their physicians.

The work will be limited exclusively to diagnosis.

Upon completion of the clinical investigation, the patient will be promptly returned to the referring physician, who will receive as complete a diagnostic opinion as possible, together with detailed advice concerning appropriate therapy. No therapy will be practiced, but the physician who refers a patient will be at liberty to avail himself of the advice and guidance of the staff in carrying out the therapeutic procedures recommended.

### FUTURE

The participating physicians, comprising 90% of the visiting staff of the hospital, regard the initiation of this type of public service as an experimental step in placing the professional and physical facilities of a large, well-equipped, general hospital at the disposal of practicing physicians of the community for the benefit of patients of moderate means. The Consultation Service will only be continued and expanded if it proves to have justified its existence by the end of the first year, and to have been adequately utilized by the

physicians of the community for patients belonging to the class it is designed to serve.

The Consultation Service will be ready to receive patients in the autumn of 1931. The exact date will be announced later.

### GENEROSITY RUNS RIOT

(From the Indiana Journal, June 1931.)

Recently, we have been reading some circulars and pamphlets sent out by the American Legion concerning the prodigality of the United States Government in furnishing a lot of compensation and gratuitous services that are costing the government a fabulous sum of money every day and the expense of which will increase as time goes on. The soldiers' bonus may have been a godsend to a comparatively limited number of ex-soldiers but, if all reports are true, most of those who obtained the bonus spent it very promptly and extravagantly for luxuries. For instance, the public press published one item to the effect that out of 700 ex-soldiers in one community who received a bonus, over 500 of the number used the money as first payment upon more or less expensive automobiles. What interests medical men is the uncalled-for generosity in providing sick benefits, including hospital care, for not only the ex-soldiers but members of their families. The United States Veterans' Bureau already has dispersed more than \$5,000,000,000 for the care of the disabled and their dependents, and in 1930 Congress made available for this purpose more than \$500,000,000 to be expended by the Veterans' Bureau during the current fiscal year. Furthermore, the sum of \$121,950,000 has been authorized by Congress for the acquisition, construction and alteration of the United States Veterans' Hospitals. As a result of this authorization the Veterans' Bureau, it is said, will have more than 63 modern, fireproof hospitals with a bed capacity exceeding 26,500, and Congress is being urged to provide additional beds.

The American Legion is sending out circulars from which we quote the following: "Do you know that if you are in need of hospitalization the United States Veterans' Bureau will grant you free hospitalization, which includes rooms, board, doctors' care, surgical care, nurses' care, medicine, physical examination, x-ray pictures, electrical treatment—in fact, free treatment of every known disease? Do you know that you also are entitled to free railroad or auto transportation to a government hospital and free return trip home? Do you know that in case an ambulance is needed to transport you to the hospital or to a railroad station in making a trip to a government hospital, this also is furnished, as well as an attendant to accompany you if your condition is such as to warrant it?" Other perquisites pertaining to death and funeral expenses are mentioned, and then the statement is made: "All of the above is offered to you free, *regardless of whether or not your disability is incident to your World War service.*" (italics ours)

We believe that the World War veterans deserve generous consideration, and especially those who have disabilities that can be traced to their service, but we believe, as is believed by thousands of the veterans themselves, that liberality and generosity can be stretched to the breaking point. In fact there has been a growing tendency toward the adoption of paternalism in many respects, with the result of increasing dependency and destroying initiative. The question arises as to where it

all will end if we keep on dipping into the public treasury for the benefit of all sorts of enterprises, good, bad and indifferent? The government already has a deficit, and that deficit is going to grow with the passing years unless an already over-burdened tax-paying public is called upon to bear increased burdens of taxation. Already the minority is paying for the support of the majority, and this fact will be all the more impressive within a few years. We seem to be encouraging the development of a very large class of loafers and shirkers who seemingly appear to think that the world owes them a living and without effort on their part to earn it, and in due course of time that class is going to be a disturbing element in our body politic that will be hard to reckon with. The disabled World War veterans deserve and should have generous treatment, but there are thousands of World War veterans who are getting far more than they deserve as compared to other people equally as deserving. A tremendous burden is being borne, and it is getting heavier every day. It is not confined to soldiers' bonus and pension and care of disabled veterans, which in reality is a minor part of the burden, but it takes in all kinds of benevolences and perquisites established through various specious pleas as to necessity or advisability, and all requiring enormous drains upon the public treasury. We long since have forgotten anything about prudence, thrift and economy, but seem to be "hell-bent for election" in our efforts to show how inconsistent and unreasonable can be our extravagances. Where will it end? There certainly must come a day of reckoning.

We are beginning to agree with Henry Ford that the way to cure our economic ills is to help people to work and not to shirk. It is nothing short of a crime to donate so extravagantly and extensively as we do now, a practice that breeds dependency and pauperism and adds to the general spirit of unrest and dissatisfaction.

### MEDICAL COWARDS

(Editorial, Jour. Indiana Med. Assoc., May 1931.)

The average physician is a moral coward. He is afraid that his practice will suffer if he takes an honest and much-needed stand in opposition to some of the things in his community that are in every way detrimental to the interests of the people, especially as concerns their health. The richest man in the town can own insanitary and disease-breeding rental property; the leading newspaper can carry all sorts of fraudulent medical advertising and publicly uphold medical quacks; the leading preachers may solicit patronage for quacks and members of pseudomedical cults; the bankers may defy quarantine and other health regulations; the public school teachers may disseminate pernicious and false teaching concerning the value of smallpox and diphtheria prevention; the Christian Scientists may be responsible directly or indirectly for any number of preventable deaths; and in fact there may be almost any kind of inconsistent, unreasonable and highly detrimental things occurring in the community and not a single physician will offer a word of protest. Is it any wonder that health matters and even the practice of medicine are getting under lay control and dictation? How long will medical men continue to be prize examples of first-class cowards?



## FUTURE OF SURGERY

(From the London Times, weekly edition,  
July 16, 1931.)

The Royal College of Surgeons has entered, in the words of its President, Lord Moynihan, on "a new career". The laying of the foundation-stone of the Buckston Browne Surgical Research Farm at Downe was the first step in that career; the final step may, perhaps, be the supersession of surgery by methods which will obviate its use. That at any rate is one of the ideals which the college has set before it in embarking on studies which have as their object a clearer knowledge of the origins and processes of disease in the animal body. The Buckston Browne Farm lies well within the tradition of British medicine. Much of the work of John Hunter was done at his farm at Chiswick, and Jenner, Hunter's pupil, achieved on a farm a discovery which doubled the population of Europe. That the Buckston Browne Farm should be situated within a stone's throw of the house, where, during 40 years, Charles Darwin thought and worked and wrote, is of good omen.

"In the special Study of Vision of School Children, by Kempf, Jarman and Collins (Public Health Report for July 6, 1928) 66% of the eyes which read 20/20 or better, read 20/50 or worse when a cycloplegic was used and nearly 20% tested 20/100 or worse after cycloplegic. This emphasizes the need for observation of children as to symptoms of the eye-strain rather than the use of the Snellen card for testing. The investigators recommend that 'any child with symptoms of eye-strain should be sent to an eye physician for examination even if able to read 20/20 on the Snellen chart'. Only 2% of the children of 6 and 7 years were found to be myopic, but the percentage rose rapidly to 9% at 12 years. Such defectives can be found by use of the Snellen test."

## School Health Department

### CLIPPINGS

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State  
Department of Public Instruction, Trenton, N. J.

"H. W. Hetherington, on examination of 1999 children, 5 to 16 years of age, in whom latent tuberculosis was shown by the tuberculosis test, and by nodules and bronchial glands demonstrated by x-rays, finds underweight of little if any value in diagnosis."

"According to the studies of Janet H. Clark, of Johns Hopkins University, a child seated 15 ft. from a north window transmitting ultraviolet rays would get no more effect from such radiation in 20 hours than he would in 20 minutes from direct sunlight in the open air at noon. The tests were made in March, April and May."

"In California, in 1924 there were 9424 cases of small-pox, or 2.41 per 1000 population. Among students of the University of California, however, there have been no cases since 1907, when satisfactory evidence of immunity to the disease was made a requirement for entrance. In Utah, where there is no exclusion of unvaccinated children from any school, the State University had a serious small-pox epidemic in 1922. Out of 50 colleges studied by Prof. Legge, of the University of California, 25 require entrants to show evidence of immunity."

"In a hearing survey of the schools of San Francisco, 8.7% of the pupils were found with a loss of 9 points or more sensation units by the audiometer, and 1.6% of the total number tested were considered sufficiently deafened to need training in lip reading."

## Communications

### HOW FRENCH DENTISTS MET THE INSURANCE QUESTION

Continued from August Journal

(Second part of letter from the Committee on  
Study of Dental Practice, H. E. Phillips,  
D.D.S., Chairman.)

As this is written, France is the latest great nation to adopt an extensive system of compulsory health insurance involving all branches of the medical profession. This law went into effect October 1, 1930, but it had long been under consideration.

When Alsace and Lorraine returned to France they brought back the German system of health insurance. In spite of the admitted defects of the German system there was a demand that health insurance be now extended to all of France. The first law passed in 1928, being largely copied from the German scheme, was so full of defects that it raised a storm of protest, particularly from the medical professions.

When the government suspended its operation this gave an opportunity for a complete rewriting. The physicians and dentists, as often under similar conditions, had been caught largely unprepared. But they now got busy in earnest and to excellent effect.

The physicians raised a fund of over one million francs (about \$40,000), set about a thorough analysis of insurance, formulated their demands and adopted them at a great mass meeting and then carefully laid out a campaign, which they carried through to a successful conclusion, to secure these demands.

Since the dentists were included in the law from the beginning, they joined with the physicians in support of the latter's demands and then formulated their own program.

Such a fight calls for a strong professional association. The French dental profession is divided into stomatologists and dentists with different educational standards, which previously had made common effort difficult. How the emergency caused them to forget their differences is reflected in these words taken from a circular issued by the stomatologists.

"It is necessary for every practitioner thoroughly to realize that any mistakes made

now will govern our destinies in the years to come. \* \* \* It is of paramount importance at this moment that the individualistic spirit in medicine give way to the collective spirit, which alone will permit some defense against the collectivities that are confronting us."

There was a dentist and a physician who were members of the Chamber of Deputies. From the beginning each of these worked both within and without the Chamber to push the following proposals of the medical professions:

- (1) Complete freedom of choice of practitioner.
- (2) Legitimization of all professional associations entitled to deal with the insurance societies by the national associations of the profession.
- (3) Direct payment of all fees.
- (4) Professional representation on all administrative bodies.
- (5) Complete safeguarding of professional secrecy.
- (6) No lay control of professional activities.

Every one of these provisions was written into the law. The dental patient brings to his dentist a letter of introduction from his insurance society; the work is performed; the customary fee charged and paid; the dentist then endorses the work done upon the letter which the patient takes to his insurance society and collects the amount due him, which in most cases is only a part of the fee. For prosthetic work the insurance society must first endorse the estimate of the dentist as to the cost.

There are representatives of the medical profession not only on every administrative body, but even on the governing committees of the insurance societies.

Although the insurance societies had more than 6,000,000 members, nearly all voters, the medical professions, purely by virtue of organization, superior knowledge of the situation, and a well-planned campaign won a victory so complete that their German confrères have enviously congratulated them on escaping the evils of the German system. This victory was so complete that instead of the enactment of the law being followed by "doctors' strikes" as in other countries, the insurance societies "struck" in many places and refused to sign the uniform contracts presented by the medical professions in accordance with the law.

It may have been a trifle too complete a victory, since the insurance societies are now beseeching the politicians to amend the law to take away some of the advantages gained by the physicians and the dentists. Whatever may be the outcome of this prospective fight, the medical professions will, at least, for the first time have the advantage which the societies have had under every other system, in that they will be in possession of the disputed territory and know exactly how to battle for their professional privileges.

Committee on the Study of Dental Practice:

R. E. Denny, D.D.S.  
H. J. Leonard, D.D.S.  
G. S. Millberry, D.D.S.  
C. E. Rudolph, D.D.S.  
H. E. Phillips, D.D.S., Chairman.

A. M. Simons, B.L., Research  
N. Sinai, D.P.H., Adviser.

## CONCERNING SALT-FREE DIET AND FOCAL INFECTION

(A letter to the Editor, dated June 23, 1931, from Dr. Harris A. Houghton, New York.)

To those who are not especially interested, it may appear more or less gratuitous in attempting to disinter a discussion which found climax in an article by Dr. Frederick M. Allen, of Morristown (Further Comments on Attacks Against Salt Free Diet, 27:126, 1930), appearing in the Journal of the Medical Society of New Jersey nearly 19 months ago. Every clinician should make it his business to keep abreast of the times by reading good current medical literature. It has been my lot to have slipped for some unaccountable reason. I missed this individual addition to medical history, and did not see it until yesterday, when it was accidentally encountered while looking for something else. Therefore, even at this late date, I am asking that the following be made a matter of record.

You will agree with me that my interest is justified by the fact that the criticism voiced by Dr. Allen was largely directed against an article by Berger and Fineberg (The Effect of Sodium Chloride on Arterial Hypertension. Arch. Int. Med., 44:531, 1929), in which I was correctly designated as an active proponent of the low-salt regimen as a part of the therapeutic indications in the management of hypertension.

To make the setting complete, it will be remembered that Dr. Allen also had some comment concerning an editorial which appeared in the Journal of the American Medical Association (The Salt Free Regimen and Vascular Hypertension, J. A. M. A., 93:1561, 1929). My own mental reactions on reading this editorial must have been similar to those of Dr. Allen's. Stimulated thereby, I wrote a signed letter asking that it be published in the correspondence column of The Journal, mildly protesting against its arbitrary tone and lack of balance in selecting evidence in drawing conclusions. Publication was declined with this comment: "I do not believe that we would be warranted in giving this matter space in The Journal. . . . Unfortunately, editors have to select the material according to their judgment as to what is correct for their readers. If they are wrong, they invariably suffer for their mistakes." The correspondence which followed is interesting, but must pass on to oblivion for lack of space. Dr. Allen was wiser than I; he turned to your excellent Journal.

My present purpose, however, is different than would appear from the above. All of us who have followed Dr. Allen's distinguished career would probably give him more credit for his brilliant work in research medicine than he would claim for himself. It may be said with assurance that without the basic work which he did, and which covered many years of difficult labor, the discovery of insulin would have been materially delayed. Furthermore, I would like to go on record as saying that I consider Dr. Allen's original lengthy article on the control of arterial hypertension by the use of the salt free diet (Allen and Sherrill: Journal of Metabolic Research, 2:429, 1922) a splendid piece of clinical research. It failed to go over, in my opinion, because up to within a short time, the mind accustomed to thinking in terms of pathology rather than perverted physiology, was in control of this particular field of medicine.



Therefore, there would be little criticism on my part for his comments on the work of O'Hare and Walker, Berger and Fineberg or on the editorial cited in the Journal of the American Medical Association. The clinical facts are stated correctly, the evidence can be reproduced at any time, and the conclusions are warranted. The so-called experiments of Berger and Fineberg indicate of themselves that these distinguished Cleveland clinicians are not fully acquainted with the physiologic principles which operate in the field where they attempt to interpret phenomena.

Consequently, we will pass all that, and turn to Dr. Allen's closing paragraph, which I quote:

"I claim originally to have developed the idea of salt restriction for hypertension without knowledge of the prior work of the French school and to have been the first to apply it accurately enough to control the great mass of hypertension cases;" . . . .

This does not have to do with the proper distribution of credit for the introduction of the salt free regimen in the treatment of hypertension in the United States, but has to do with its *concentration*. We may accept it without guile. Personally I can make no such claim. In 1909, I read the proceedings of the Kongress fur Innere Medizin, held that year at Wiesbaden (Verh. d. 25 Kong. Inn. Med., 1909, s. 43 *et seq.*), and immediately began the practice of salt withdrawal in the treatment of hypertension and nephritis. Results began to appear which prior to that were impossible. The technic of this diet is difficult but not prohibitively so. My own technic was not perfected to my satisfaction until 1917 or 1918. I was assisted, in working it out, considerably by Dr. Cyrus W. Field, of New York, who, as the war closed, was connected with the Army Hospital for Officers at Lakewood, New Jersey. My first paper on the subject was published in the Medical Record, March 18, 1922. The Medical Record went out of business as an independent periodical with that issue!

Salt withdrawal, or "dechlorinization", for the nephritides was talked of in this country as early as 1905 (Kelly and Fife; Miller and Billings: Trans. Asso. Amer. Phys., Washington, D. C., May 16 and 17, 1905) following the publication of papers in France by Widai and Javal in 1903 and by Ambard and Beaugard the year following. It cannot be fairly claimed that the application in America of the dietary principles to hypertension was made in literature until Dr. Allen himself, and Dr. John H. Musser, of Philadelphia (in that order), penned short clinical articles which appeared in different journals and within a few weeks of each other (Allen: Jour. Amer. Med. Asso., 74:652, 1920. Musser: N. Y. Med. Jour., 112:570, 1920). My own effort of 1922 gave credit to both, and also attempted to give some theoretic basis for this rational therapy; an attempt which Dr. Allen did not make until 1923.

Dr. Allen's article of 1923, which was his first large effort along this line, generously gave both Musser and me credit for previous communications. He was especially generous with me. So we may accept, as stated, his statement quoted above, especially as it is suitably provided with limitations.

His second statement, however, is one which interests me more:

... "also, that nobody shared this view at first."

I realize now, after over 18 months in a more

or less cataleptic state, that Dr. Musser and I are in the same class so far as Dr. Allen is concerned. It sounds egocentric to openly and brazenly class myself with Dr. Musser, but, Mr. Editor, I didn't do it first.

Dr. Allen feels very strongly on the subject of the salt-free diet for hypertension, as I do. In spite of opposition, he would like to see the method of treatment popularized, as I would, that many, instead of a few, who suffer from hypertension may have opportunity to receive its benefits. He rightfully calls attention to symptomatic relief independent of the arithmetic of decline. But Dr. Allen has paid little or no attention to the eradication of focal infections, so far as I can judge from his published work, whatever remarks he may have made being couched in most general terms. In my opinion, this part of the treatment is quite as important as the exhibition of the salt-free diet. Undoubtedly certain positive results can be achieved by use of the latter, but the question of progression as well as symptoms is involved in the former. I took up this side of the question first in 1911, and began to write in the Long Island Medical Journal in 1915. Strictly speaking, the idea was not original, as it followed the reading of Billings' original communication in the Archives of Internal Medicine (1910) on the subject of the relation of focal infections to the nephritides. Nor am I inclined to make it an exclusive step, for a good many good minds in medicine must have been ready for it.

Likewise, now that 20 or more years have passed, a lot of good minds harbor theoretic beliefs but fail to put into practice that which experimental and scientific medicine have placed at their disposal. The practice is difficult, more difficult than the proper exhibition of the low salt diet. The difficulties, however, are not entirely insurmountable, except in individual cases, and the rewards to the patients are very great. I am living in hopes that Dr. Allen will eventually lay the weight of his standing and positive individuality on the side of the removal of focal infections in the routine treatment of hypertension, for they or syphilis, one or both, are always there. I can assure those who are interested that this phase of the subject is worthy of a life time of study and experience.

Very truly yours,

Harris A. Houghton, M.D.

## DEFENSE AGAINST MALPRACTICE SUITS

(An item contributed by Dr. Christopher C. Beling, Chairman of the Special Committee on Medical Defense.)

One of the most common causes mentioned in malpractice suits is embodied in the complaint that a fracture or dislocation has been improperly treated. Reviewing a large number of such claims we note a peculiar disregard of natural safeguards which one would expect a physician to keep in mind when treating such patients. For instance, claim reports show the prevalence of the following factors:

- (1) No radiograph was made.
- (2) Radiograph was made but, apparently, was not consulted again during treatment.
- (3) Radiography was used to diagnose condition, but not to show result of treatment.

(4) Physician relied too much upon his sense of touch.

(5) No satisfactory examination made after fracture had been supposedly set.

(6) Plaster cast applied on day of injury was not again examined or removed until bones were presumably united.

(7) Patient was not properly instructed as to the danger of moving the limb or twisting the cast which had been applied.

(8) In many cases, the physician had made no detailed record of examination or treatment.

Furthermore, we find that physicians not infrequently show a considerable disregard of their own interests, with reference to radiographs and consultations:

(1) Some care should be exercised in the giving of x-ray pictures to patients or to their attorneys.

(2) Hospital officials, interns and nurses should be instructed not to exhibit radiographs or records to patients, or to other persons, without special permission of the attending physician.

(3) Whenever there is "trouble in the air", or one is doubtful about his results, a specialist should be brought into consultation; as double checking is a factor of safety.

**Typical Case.** From the records we offer the following example: A physician in one of our counties telephoned for a specialist to assist him in a troublesome case of wrist injury. There had been an oversight or a wrong diagnosis from a radiograph, and necessity for an operation had arisen. The original radiograph had been given to an attorney, without the physician's knowledge and consent. The picture disclosed, definitely, a fracture which should have been set—and an operation avoided. Settlement of the suit cost \$3000. The patient has more than 25% permanent disability.

This simple relation of facts tells an interesting story, and suggests to all physicians dealing with fractures and dislocations the necessity for great care in all the details of that work, and in the protection of themselves; for the major proportion of malpractice suits arises from the treatment rendered such patients.

## Woman's Auxiliary

### A TASK PROPOSED FOR THE AUXILIARY

The Editor of this Journal being one of those hay-fever victims who is rendered utterly useless and helpless during the months of August and September each year by the pollen polluted air, everywhere in these eastern states, and who is virtually compelled to seek refuge in the high Rocky Mountains, high Sierra Mountains, or an ocean voyage, was much impressed by a report of a Woman's Auxiliary Campaign to Eradicate Weeds in El Paso, Texas. Being at the same time mindful of the fact that many of our own County Medical Society Auxiliaries have been asking for "something to do", we reproduce herewith, from the Southwestern Medical Journal of June 1931, the full report of what El Paso women have done toward relief of hay-fever and asthma sufferers, and respectfully suggest that here is one answer to that often repeated question. Fortunately it is a task suitable for adoption by each and every county organization.

### EL PASO'S HISTORY OF WEED ERADICATION RELATIVE TO HAY-FEVER

Mrs. J. A. RAWLINGS,

Chairman of the Weed Eradication Committee of the Woman's Auxiliary to the El Paso County Medical Society, El Paso, Texas.

Russia, the most talked-of country today, has unconsciously succeeded in putting over on our country one of its worst pests—the tumble weed—which is the "Russian thistle". The story goes that in a shipment of grain from Russia was a new kind of seed; some of the grain was sown in New Jersey, and there appeared the Russian thistle which grew rapidly and, like a huge ball, has tumbled its way from the Atlantic to the Pacific. Hay-fever is everywhere prevalent as never before, due largely to this and many other weeds, plants and grains, which give forth pollen.

Two medical experts, after a survey of El Paso, said that 50% of the hay-fever here could be prevented if *tumble weed* and *pig or carcass weed* were eradicated, the former prevalent from May till frost, the latter from August to frost. Earlier in the season, the pollen from cottonwood trees causes trouble; also pollinating Bermuda grass. The *tumble weed* is our worst offender in the early summer. In appearance it is very attractive; no hard prickles when small; it starts with a tap root producing tiny pointed branches, the size of the lead in a pencil, and of a grey-green color that deepens with age. It branches irregularly, resembling the sprengenic fern; it grows to be a huge bush, 3 to 5 feet high, becoming round and brown in the fall. The wind severs its tap root and it begins its tumbling journey, scattering thousands of seeds. It has been estimated that an average tumble weed matures 40,000 seeds. Think how much public health work you do when you pull one weed. Its mission is to produce pollen readily carried through the air, and therefore readily causing hay-fever. A disease so common, we think of it as we do a cold, but a most distressing disease producing real suffering; it causes a feeling of depression that makes life seem not worth the living. Hay-fever lessens resistance and depletes the system so that other diseases follow. Little children are among the greatest sufferers. An attack may begin early in the spring and last till frost. One often becomes totally unfit for work.

In 1924, the El Paso Herald advocated a weed eradication campaign. In March 1927, Dr. George Turner talked before the Woman's Auxiliary to the El Paso County Medical Society on the cause of hay-fever and its menace to health. He stated that he had talked before every organization in town and had not yet succeeded in getting anything done. It was determined to do something. The newly installed president, working through her strong executive committee, appointed speakers to talk before all organizations of men and women possible, explaining the need for weed eradication, and the 89 members of the Woman's Auxiliary asked people in the homes to free their yards from weeds and to clean vacant property. The response was gratifying. The school children were asked to pull tumble weeds and rewards were offered. In 3 days 250,000 weeds had to be paid for and we were forced to pay our debts with public contributions.

Mr. H. D. Slater, Editor of the Herald, put on a fine publicity campaign, designating one of his best writers to the job. The result was excellent.



In fact, the articles attracted the attention of our President of the Woman's Auxiliary to the State Medical Society and she had her secretary send clippings to the various medical auxiliaries in Texas. We succeeded in getting the coöperation of the El Paso County Medical Society, the Chamber of Commerce, the Board of Health, the city schools, the railroads and the many organizations of the press. Representatives from the above organizations, together with those from 18 women's organizations, were asked to meet with the City Council. Our Mayor, Mr. Thompson, saw the need for weed eradication and did all in his power. There was no budget.

The various departments coöperated. Dr. McCamant, for the El Paso County Medical Society, proposed an ordinance sponsored by Drs. Rawlings and Brown, of the Board of Health, to fine property owners who did not clean lots. In 1929 another ordinance was passed taxing property, and that is now in force. There was a splendid spirit of coöperation and Dr. Outlaw, City Health Officer, put through a fine piece of work.

Favored by dry weather and cleaning of tumble weeds there was very little hay-fever till August, when much rain brought forth the *careless* or *pig weed* in great profusion and there was much suffering. This weed has various names and came from Europe to Canada and the United States. In 1928 the City Council budgeted \$1200 for weed eradication. In April the Woman's Auxiliary asked coöperation of the City and Health Departments to put on a short educational campaign. The city property was pretty well cleaned in the early summer but the \$1200 did not last through the season. Those not afflicted with hay-fever did not see themselves as "their brother's keeper". In August the pig or careless weed became rampant and there was such a flood of hay-fever that there were thousands of cases; those who could, left town, some not to return. The following year (1929) the budget was increased by \$1000 and the city offered to clean property at \$1 per lot. Many sent checks; 5000 lots were cleaned. Real estate men and railroads coöperated.

This last year, 1930, the work was better organized with a Weed Eradication Department. The weather was dry and the combination was like preventive medicine. Few people got hay-fever. As usual, the rains brought forth the pig or careless weeds and they were cut. For the first time the city had the appearance of being cared for, though not half of the lots were free from weeds. Example has been a strong influence in homes. A lady said she was the first to clean her place of weeds; the next year 2 did likewise and now the whole block is beautifully kept. We are proud of the last year's report: over 10,000 lots were cleaned. It shows fine coöperation and work. To Dr. Outlaw great credit is due. The press has shown the finest spirit of helpfulness. Dr. Turner reports that since this work on weed eradication not only are there fewer cases but they have been less severe and where asthma was frequent it is now rare. This year promises the most luxuriant crop of hay-fever weeds ever known; already many people are afflicted. The weed eradication department is doing fine work. Notices have been sent to nearly all vacant property owners and many checks received to pay city for cleaning lots. Many people are cleaning their own property. The city has 25 men working every day on city property and vacant lots. A big factor now is the pollinating Bermuda grass

in the yards of residences, and a notice is being distributed by the Boy Scouts, reading:

#### "PERSONAL NOTICE WEED ERADICATION

The Mayor of El Paso and the Board of Health, with the help of the Woman's Auxiliary to the El Paso County Medical Society, which for the past 5 years have stressed weed eradication and through the coöperation of the Boy Scouts of America, do hereby give notice that, in accordance with an ordinance passed by The City Council on May 3, 1929, owners and occupants of real estate are required to eradicate and destroy hay-fever weeds, notably tumble, pig and careless weeds and to cut Bermuda grass often enough to prevent seeding. Good citizens do not have to be compelled to obey city ordinances. This notice is handed to you in the interest of several thousands of hay-fever sufferers in El Paso. The Health Department reports that 20% of our population suffers from hay-fever; not only adults, but children. One's efficiency is cut from 15% to 50%; sometimes totally. You can greatly aid in reducing this suffering by coöperating. If everyone occupying or owning property will attend to its need the problem is solved. Prove your loyalty to El Paso and help make your city clean and healthful."

The Mesilla Agricultural College is now experimenting by spraying weeds. We tried burning but now our faith is in the man with the hoe and the Fire Department burns the pile. The Woman's Auxiliary has a standing committee of 15 to assist in every way possible with this work. Recently a talk was given over the radio by a member. This is a big problem but much progress has been made, and this year promises greater coöperation.

Some citizens are making contributions to poppy seed. The Garden Club and Woman's Department of the Chamber of Commerce are planning to beautify the vacant lots. Just as a home, by its cleanliness and beauty, reflects the character and ideals of those who live there, so a city, by its cleanliness and beauty, reflects the characteristics and ideals of its citizens. We hope in time to have the most beautiful and cleanest city in the Southwest.

#### Union County

Reported by Mrs. C. A. Hoffman

The regular meeting of the Woman's Auxiliary to the Union County Medical Society was held at Bonnie Burn Sanatorium at Scotch Plains on July 8. The roll call showed a very small attendance, only 8 members being present. Minutes of the last meeting were read and approved.

As Treasurer McElhinney was absent, her report was omitted. Reports from various committees were called for. Report of special meeting and dinner, held at the Watchung Valley Club, Plainfield, May 27, was read by Mrs. R. A. Gregory. It was moved and seconded that the Treasurer pay a deficit of \$5.40. It was moved and seconded that a committee of 2 be appointed to confer with the Treasurer regarding the sending out of notices for annual and past dues. These notices to be sent out periodically. It was moved and seconded that Mrs. N. Currie and Mrs. W. Hallock confer with Dr. Bensley, of Summit, and Dr. Laird, of Westfield, suggesting that the county medical society present to its members a number of good reasons why the wives of doctors should be members of the Woman's Auxiliary.

Delegates' reports from the Woman's Auxiliary to the New Jersey Medical Society Convention, held at Asbury Park, and the Woman's Auxiliary to the American Medical Association Convention, held in Philadelphia, in June, were presented by Mrs. Hubbard.

The Nominating Committee, consisting of Mrs. E. A. Kinch, of Westfield, Mrs. Harold Johnson, Plainfield, and Mrs. D. McElhinney, of Elizabeth, was announced by Mrs. Hubbard.

It was moved and seconded that the Treasurer and Corresponding Secretary be authorized to secure a card index for paid-up members.

Informal discussion followed.

It was moved and seconded that meetings be adjourned until October.

## County Society Reports

### ATLANTIC COUNTY

#### Atlantic City Hospital Staff

Joseph H. Marcus M.D., Secretary

The meeting of the General Staff of the Atlantic City Hospital Staff was called to order July 24, at 8.45 p. m., by President Milton S. Ireland. The minutes of the previous meeting were read and approved as read.

The scientific program was presented by Dr. Joseph H. Marcus:

*Epidermidolysis Bullosa Hereditaria.* David Smeethy, aged 3 years. Chief complaints: blisters, since the age of 3 months; the slightest bruise turns to a water blister; is nervous, has poor appetite, cries, head sweats at night, photophobia, insomnia, tears and bites hands, rubs face with hands; bleb appeared on heel at 3 weeks of age.

*Epidermidolysis bullosa:* Synonyms—epidermolysis bullosa hereditaria; acantholysis bullosa.

*Definition.* An exceedingly rare, congenital tendency to vesicle and bullae formation of any part of the integument subjected to any form or degree of traumatism.

*Symptoms.* The disorder is a rare one, and was first described by Goldschieder in 1882. In the vast majority of instances the presence of the condition is first noted in early infancy, although occasionally it does not develop, or at least become apparent, until later in life. The lesions consist of vesicles and bullae of various sizes which develop as a result of even slight pressure or irritation. They are usually filled with serum, but may contain blood.

*Etiology.* The malady is decidedly hereditary in character; most of the cases, with the exception of a few of the acquired form, giving a history of occurrence in one or several of the offspring of several generations. As mentioned, trauma is the exciting cause. As yet, no other factors are accepted. That the disorder is an angioneurosis of hereditary origin is perhaps the most logical explanation.

*Treatment* is purely symptomatic with a special care in the treatment of blebs. The neurotherapy type is a combination of calcium lactate para thyroid. The differential diagnosis at times resolves itself in acrodermia, pemphigus, pellagra.

*Prognosis.* The condition usually continues throughout lifetime, although frequently with advancing years the tendency becomes less pronounced.

Dr. William J. Carrington presented his re-

port of the Gynecologic Service for December 1930, January, February and March 1931, as follows:

During the 4-month period covered by this report there were admitted to 5A 129 patients, an average somewhat over 1 a day. All were examined and studied; 18 of them did not need operative interference, 6 who did declined and signed releases, 22 were curetted for retained secundines, 23 had gynecologic operations other than laparotomies, and 64 were sectioned. There were 48 consultations, mostly preoperative. There were 2 deaths.

*Cancer.* Three cancer patients were admitted, 1 with advanced carcinoma of the vulva; the hemorrhage and sloughing were temporarily controlled with fulguration; two received radium, 1, 1920 and the other, 5680 mg. hr. It has been 5 years since we have operated upon a carcinoma of the uterus.

*Fibroids.* Three myomectomies were done and 22 hysterectomies; 1 tube and ovary were saved in patients under 40 where possible.

*Appendectomies.* Prophylactic appendectomies were done in 38 of the 64 laparotomies.

*Fibrosis Uteri.* In 2 cases of fibrosis the bleeding was controlled with 960 mg. hr. of radium.

*Ovaries.* There were 29 bilateral and 8 unilateral oophorectomies. There was 1 chocolate cyst, 1 dermoid cyst, 12 poly cysts, and the remainder were removed either in patients over 40 who had hysterectomies, or in women with pyosalpinx.

*Fallopian Tubes.* Two were resected; 1 was injected with 3 c.c. of 10% argyrol in a young girl whose other tube was hopelessly destroyed by gonococci. In all there were 12 unilateral and 29 bilateral salpingectomies. In 1 case of chronic asthma the patient was sterilized by partial excision of the tubes.

*Displacements.* One Gillian and 2 Montgomery operations were performed for retrodisplacement.

*Broad Ligament Cyst.* One huge suppurating broad ligament cyst was erupted and packed, no attempt being made to excise the walls of the sac.

*Adhesions* were released in 1 case. The preoperative diagnosis of pyosalpinx was wrong, else we would not have operated. She probably has more adhesions now than before operation.

*Ectopic Gestation.* One patient was admitted and operated upon.

*Cesarean Section.* Three were done—2 for contracted pelvis, and 1 by mistake. We thought it was a soft fibroid. The fetus had been dead and there was no amenorrhea.

*Omental Tumor.* What we took to be a dermoid of the right ovary turned out to be an orange-sized inflammatory mass of omentum with no other pelvic pathology.

*Fistula.* One ureterocervical fistula appeared 10 days after a difficult hysterectomy. It was doubtless caused by a deep suture which caught the ureter. It opened and closed several times before finally healing spontaneously.

*Cystocelc.* Four anterior colporrhaphies and 2 Watkins-Wertheim interposition operations were done.

*Rectocelc.* Nine perineorrhaphies were performed.

*Polypi.* There were 4 polypectomies.

*Cervix.* The cervix was cauterized twice, 4 Sturmdorf amputations, 1 double flap operation and 1 trachelorrhaphy were done.

*Sebaceous Cysts.* One patient had multiple sebaceous cysts of the perineum. These were excised.



*D and C.* There were 2 diagnostic curettements and 15 curettements in connection with repair operations.

*Bartholmectomy* was done twice.

*Cystoscopy.* Six cystoscopic examinations were made.

*Abortions.* There were 2 therapeutic abortions, 1 for nephritis under spinal anesthesia, and 1 under nitrous oxide for pulmonary tuberculosis; 4 complete abortions were discharged without operation; 22 incomplete abortions were dilated, where necessary, lightly curetted and tightly packed. This method is frowned upon by a number of leading gynecologists who prefer to let the placental fragments rot out, unless there is violent hemorrhage, lest the meddlesome curet break down the protective inflammatory zone. If watchful waiting is to be employed let us use it at home and not deprive needy cases of our all too few gynecologic beds. None of these curettements had any complications whatever, and their average stay in the hospital was less than 4 days. Of these 22 incomplete abortions 2 were colored and 20 were white; 11, exactly half, were Atlantic City women; 22 incomplete abortions is the smallest number in years. We are proud of this decrease. In the not dim distant past our ward was the happy hunting ground for retained secundines, a port of refuge and refuse for the abortionists of South Jersey and Philadelphia. We were over-run to the exclusion of most everything else. Not so this year. Why? It is unlikely that the depression has had anything to do with it, and there is no amenorrheic moratorium. But the real reasons, I think, are the increasing knowledge and use of contraceptives and no abortionists nearer than Wildwood or Cape May.

In connection with the subject, some of you know that Soviet Russia legalized abortions in November 1920. Ch, there were abortions in Russia under the Czar. Reputable physicians produced prophylactic abortions for medical reasons, as we do here. But the rich employed skilled but unscrupulous specialists, and the poor were left to ignorant, dirty midwives. After the revolution, Soviet Russia attempted to care for all alike and legalized abortion. Any Russian woman can request an abortion at any government hospital. These abortories are scattered all over the country. Boyko, of Kbarikov, studied the results after 10 years and reports that the reasons for abortions in the Soviet Union were as follows: (1) Illness, 21.6%; (2) nursing a baby, 6.8%; (3) desire not to have a child, 28%; (4) poor economic conditions, 48%; (5) desire to hide pregnancy, (a) in small towns, 4.1%; (b) in large towns, 0.5%.

Now, while abortion is accessible to every Russian woman, there are some interesting regulations: (1) The time limit is 3 months, if the indications are social. (2) Repeated abortions are forbidden closer than 6 months apart. (3) The patient must stay in bed 3 days. (4) Finally, the Soviet law requires that to every woman who applies the danger must be explained.

As might be expected, the legislation on abortion in Russia met with a flood of criticism from the other countries of the world. It was claimed that Russia would degenerate. But Boyko states that the birth rate under the Soviet rule is the same as under the Czars, approximately 4%, while in France it is 1.3%, and in England 3.4%. The total increase in population in Russia is 3,500,000 a year.

*Deaths.* There were 2 deaths during the service. The first of these was preventable. E. C., colored, aged 33, without children. She had a tender frozen pelvis. Preoperative diagnosis was bilateral pus tube with a small uterine fibroid on the left side of the uterus. Her Wassermann and Kahn were negative, her hemoglobin was only 50%, and she had a little fever, 99.4, and most significant of all her blood sedimentation test showed marked activity. However, the medical chief reported her heart and lungs all right. Her urinalysis before operation was negative, and her P. S. P. was 35%+25%, or 60%—2 hours. Her leukocytes were only 9750 and her temperature did not flare up after several vigorous bimanual examinations. So we decided to operate in spite of her low hemoglobin, and her marked blood sedimentation activity.

We found bilateral pyosalpinx all right, but the mass we took to be a small fibroid on the left side was a dermoid cyst of the ovary. The operation, a bilateral salpingo-oophorectomy and appendectomy, was done under nitrous oxide-ether, and was not difficult or tedious. But the next day her temperature went up to 103; her pulse was 150, weak and thready, and her respiration varied between 50 and 70. Her chest remained clear, but her kidneys shut down and the 20 oz. obtained showed 40 mgm. % of albumin, and numerous hyaline, and fine and coarse granular casts. In spite of the usual preagonal therapeutic activity, she died 2 days after operation. This fussing included digitalis, caffeine, adrenalin, morphin and atrophin, saline and glucose, an ice bag to the precordium, and Locke Ringer by Murphy drip. She should not have been operated upon. Had I paid heed to her sedimentation test I would have postponed operation until she had established immunity. This I thought she had done. But the absence of fever, the absence of leukocytosis, the absence of a flare up after bimanual examination are not enough. The diagnosis of established pelvic immunity rests not upon 3, but upon 4, cardinal symptoms. All of them must be right if we are not to subject our patients to unnecessary risks. This case is a never to be forgotten illustration of the value of the blood sedimentation test.

The other death will be reported by Dr. Uzzell.

*Ruptured Uterus.* One of our most interesting cases was that of a spontaneous rupture of the uterus during labor, without manipulation, pituitrin, ergot or quinin, and without previous cesarean section. The patient was a healthy white woman, 31 years of age, with a large baby, presenting the breech at 42 weeks of pregnancy. She had 1 child born 6 years ago without the slightest difficulty. Ten years ago she had an appendectomy but there was no pathology of the uterus or adnexa. After 10 hours of active labor this time the cervix was tight and rigid. The baby was large and breech presented. The abdominal tumor seemed to be divided at the level of the umbilicus by a ridge, the ring of Bandl. After consultation, a section revealed an oblique, jagged rent in the lower uterine segment. The contents of the uterus had not escaped into the peritoneal cavity, but the left uterine artery was torn and the anterior and posterior layers of both broad ligaments were separated by a hematoma, a distance of 3 in. In oblique, jagged tears hysterectomy is the operation of choice, but the condition of the woman and the mechanical difficulties were such that the baby and placenta were removed and the tear

sutured. Convalescence was placid and recovery complete and uneventful.

Rupture of the uterus is uncommon. Scheyer reports 12 cases in 11,300 confinements. But they were all due to pituitrin administered in the second stage of labor, or to the separation of a previous cesarean scar. In past years I have had 2 cases where the cicatrix gave way. Both had been operated upon by good men. However, it is likely that the sutures at the original section were drawn so tight that ischemia resulted, and scar tissue was formed.

To those of us with excellent hospital facilities available, any treatment for rupture of the uterus other than immediate laparotomy is unthinkable. Yet Klein reports 149 ruptures treated surgically with a mortality of 44%, and 198 cases treated conservatively, by packing from below with a mortality of 32%. Klein states that packing causes less trauma, and can be done quickly, at home, with less skill.\*

Mendenhall made the diagnosis of ruptured uterus with the head down. He delivered quickly with forceps, explored the uterus with his hand, found that the placenta had escaped, discovered it among the coils of intestines, brought it down and packed, because the patient was pulseless. He gave her a transfusion and recovery was prompt and complete.

In connection with pituitrin, some of you may not be familiar with Hoehne's sign of rupture of the uterus. The sign is the complete absence of uterine contractions after repeated injection of pituitrin. A poor sign, if you ask me, but Lazarevic had a case of atypical rupture without shock or other signs save Hoehne's. The rupture was 12 cm. long through which the placenta and half of a large baby had been extruded into the abdomen.

After an exhaustive search through the literature, I have been able to find but one reference to a spontaneous rupture of the uterus during labor. Dr. Rojas, of Buenos Aires, had a case in a woman of 20 who had a neglected shoulder presentation. As in our case, there had been an appendectomy.

The recovery of our patient was due in part to the suppression of the desire to do a hysterectomy, and in part to prompt interference. She could not have long survived with her uterine artery pumping away as it was. After an hour or 2 most of them die, yet Grosse reports a recovery with operation 12 hours after rupture.

The coöperation of the superintendent, the staff, the laboratory and the nurses was excellent. Again this year we were not satisfied merely to make a preoperative diagnosis. The intern, the chief resident, the associate and the chief had to record in black and white their preoperative diagnoses. The living pathology varied so widely at times from our preoperative diagnosis that it was hard to remain nonchalant. But all of us learned more from our mistakes than from our successes.

Dr. Edward Uzzell presented a case reported from the service of Dr. William J. Carrington.

Dr. Samuel Barbash, Chairman of the Committee on "Investigation of Digitalis Preparations for Hospital Usage", submitted his report as follows: A recommendation that the following preparations be used in hospital routine and so eliminate the accumulation of large number of various preparations of digitalis carried in the pharmacy of the hospital: (1) Standardized tincture of digitalis; (2) tablets of powdered leaf; (3) digitan for hypodermic use.

Following a general discussion by the members present, the meeting was adjourned and, shortly following, the Major Staff convened.

## Obituaries

DAVIS, Lester R., died July 13, 1931, at his home, 59 Chancellor Avenue, Newark, from heart disease. He was on the staff of the Presbyterian and St. James' hospitals and was a member of several fraternal organizations. He was in his forty-eighth year.

Dr. Davis was the son of the late Lester Davis, of Elizabeth, who was president of the Elizabethport Bank. He was graduated from Pingry School in Elizabeth and the University of Pennsylvania. After completing his medical work, he went to Newark, where he had practiced since.

He was a member of Salaam Temple and of the Jr. O. U. A. M. He also was a vestryman of St. Stephen's Episcopal Church in Newark. Besides his general practice, he served as physician for The Celluloid Company of Newark.

Dr. Davis leaves his wife and a daughter, Mrs. Quentin Ferris, of Chicago.

GARRISON, Biddle H., M.D., an outstanding Monmouth county surgeon, died at his home Sunday, August 30, 1931, from complications of heart and kidney ailments. He was 53 years old.

Dr. Garrison was chief of staff at the Ann May Hospital in the county.

He graduated from the Hahnemann Medical College, Philadelphia, in 1898, and began his practice in Red Bank in 1901.

Surviving him are his widow and one son, Biddle H. Garrison, Jr. Funeral services were held Wednesday, September 2. Burial took place at Dr. Garrison's birthplace, Elmer, N. J.

LOCKWOOD, Frank Wesley, one of the leading physicians in the Oranges until his retirement last October, died August 9, 1931, at his home, 43 Woodland Avenue, East Orange. He had been in failing health several months.

Dr. Lockwood was East Orange's city physician from 1905 until 1913 and when he retired was one of the 2 active original members of the staff of St. Mary's Hospital, Orange. He at one time was the hospital's chief of staff.

Born in Kingsland, 59 years ago, Dr. Lockwood practiced in the Oranges 35 years, specializing in surgery, although he was a general practitioner. He was graduated from the College of Physicians and Surgeons of Baltimore in 1893. Dr. Lockwood lived in Bloomfield before going to East Orange. He held memberships in Orange Mountain Medical Society, William Pierson Medical Library Association, New Jersey Society of Surgeons, New Jersey Medical Society and the American Medical Association.

Surviving are his wife, Mrs. Clara H. Lockwood, and 2 sons, Dr. Nelson W. Lockwood, of East Orange, and Elmer K. Lockwood, of Newark.

VAN MATER, John H., M.D., of 9 Second Avenue, Atlantic Highlands, New Jersey, died at his home Wednesday, August 26, 1931. He was 74 years old.

Dr. Van Mater was a former Mayor and Monmouth County Sheriff and practitioner here for 48 years.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 10 ORANGE, N. J., OCTOBER, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## AN HISTORICAL SKETCH OF THE DEVELOPMENT OF PREVENTIVE MEDICINE IN THE STATE OF NEW JERSEY

J. BENNETT MORRISON, M.D.,  
Newark, N. J.

It has been frequently stated that, if the medical profession had been as deeply engrossed in the development of preventive medicine as it has been in the cure of disease, we would now be in the millenium of human health and physical adaptation to our environment.

In this brief review, I have endeavored to draw up a chronologic record of the efforts of our profession in New Jersey in the development of preventive medicine, to indicate that, up until recent years, the general public has lagged far behind and that the legislature of our state has had to be urged and invoked, in many instances for years and years, before our repeated recommendations have been enacted into laws.

In 1766, there was formed in New Jersey the first State Medical Society in America. Dr. George H. Lathrope published recently in this Journal a delightful paper outlining the early days of medicine in the colony, and Dr. E. C. Jackson has written a charming biographic sketch of the first President of the State Society. It is sufficient for me to record that the Medical Society of New Jersey was established for the betterment of the health of the community and took the first steps in preventive medicine.

The history of the early practice of medicine, in the colony, was bound up with the life work of the clergy. They were the minister-doctors. Educated for the ministry in European countries, they studied what was then known of medicine, before coming to the wilds of America, in order that they might couple with the salvation of souls the salvage of the human body in accident and disease.

In 1787, the Medical Society of New Jersey wrote to the Massachusetts Medical Society acquainting that organization with the origin, progress and existing state of the Medical Society of New Jersey and inviting it to enter into a correspondence in matters relating to health and the cure of disease. This is the first record of an attempt to reach outside of the colony in an effort to supply healing, comfort and guidance in health, to the public. It is referred to at this moment because it later led to introduction into New Jersey of vaccination against smallpox, the first real step in the colony toward preventive medicine.

Dr. Burnett, President of the Society in 1786, in his Annual Address, said, in part: "The great share of public confidence and favor, and the countenance and support of reputable and worthy characters of the state, not undeservedly, I hope, yet almost beyond expectation, affords the most flattering prospect of great future utility. I hope, I trust and believe, that by wise and prudent deportment, you will, as a society and individually, merit more and more the patronage and esteem of the public. All nostrums retained and kept secret from avaricious motives, and

more especially puffed up for sale, are unworthy of the character of a physician. They are dangerous to society, and I venture to say have slain their thousands and tens of thousands. What I mean is that you are to put a helping hand to the great work of promoting medical knowledge. You are to assist in raising the noble, God-like art of healing to the highest pitch of perfection."

It is worthy to note that this evidently competent and progressive physician advocated the writing out of histories in all cases, describing accurately the symptoms in the order of their occurrence, observing the age and constitution of the patient, the place—evidently the location—of the disease and the state of the liver, together with the medicines administered and their effects. He continues: "This, I confess, requires great attention and diligence, but would be attended with unspeakable advantage, both to the patient and the physician, abundantly sufficient to compensate, and more than compensate, for all the time and trouble."

Our record of events will, as you will note, be in large measure a record of the State Medical Society and its officers. In 1788, the President, Dr. Elmer, read a very valuable dissertation on "The Qualities of Air", and, although the physicians of that date had not as yet comprehended the benefits of pure air and the part it played in respiration and health, here was evidence of a groping in the dark for what we so well know in these days, aided as we are by the light of later scientific discoveries.

In 1789, Dr. James Stratton made the first reference in this country to influenza, accurately describing the symptoms and respiratory involvement.

In 1790, Dr. Griffiths, the President, read a paper on "Pulmonary Consumption" in which he said: "When a person happens for a long time to remain in contact with another laboring under this disease, the putrid miasma in perspiration enters into his vessels, and, as if by fermentation, assimilates his blood into its own putrid nature." It is not the purpose of this paper to deal with the etiology or prognosis of disease nor to discuss treatment

in this early period, but Dr. Griffiths was probably in advance of his time, in conceding the infectious nature of consumption although he did not know the true method of spread of the disease, and calling attention to its infectious nature must have had a salutary effect.

In 1792, the President, Dr. Dunham, read a very voluminous paper on "The Benefits of Bathing", as a preventive measure in medicine. It is too long to quote here but it was the first recorded dissertation on this valuable adjunct to health ever brought to the attention of the physicians in the province.

While inoculation with the specific virus of smallpox was extensively employed in the New England States, following its introduction by Cotton Mather and Dr. Boylston in the year 1721, and was rather extensively used up to the year 1760, to produce a mild form of the disease which far too frequently proved fatal, it remained for a *physician in New Jersey*, so far as the recorded history shows, to be the *first physician in America vaccinated against smallpox with kinpox virus*. I am sorry I cannot find his name, but he was a member of the Standing Committee in after years, 1846, and that committee was composed of Drs. A. L. Smith, W. T. Mercer, and S. H. Pennington, all of Newark. This physician had himself vaccinated in 1810, and it proved a protection through several outbreaks of smallpox for at least 35 years. It was not until 1834, 45 years after this first success in our country, and 58 years after the announcement of Jenner's masterly work in smallpox vaccination, that a committee of the State Medical Society in New Jersey urged the legislature to make vaccination compulsory. It must have been extensively employed in the interim, however, for back in 1829 the Standing Committee reported that it had proved successful in every instance where it had been tried.

In 1812, a committee of the State Medical Society was formed to make a study of the meteorologic conditions in the state. In 1820 the By-Laws of the Society provided for a "standing committee to make a yearly survey of the general health of the people, a study



of the climate, soil, ponds and streams, altitude, forestry and the cause and cure of epidemics”.

The reports of these standing committees were the direct forerunners of the request of the Society, in later years, for establishment, by the legislature, of state and local Boards of Health. In 1829, a resolution was adopted against the evils of the use of alcoholic beverages. Then, as now, New Jersey was as wet as the Atlantic Ocean and inebriety was having a disastrous effect upon public health and morals. The resolution reads as follows:

*“Whereas*, the vice of intemperance has become an evil much to be deplored and threatens in its progress to sap the foundations of our civic and religious institutions;

*Be it resolved*, That we at home and abroad exert our influences to suspend the use of ardent spirits in the ordinary associations and avocations of our fellow citizens, believing that of all the deviations from the paths of duty, there are none which so forcibly impeach the intentions of men to the character of rational beings as the inordinate use of spirituous liquors. \* \* \* \* \*

*Resolved*, That, with a view to guarding against a taste and contracting a habit of drinking spirituous liquors, we will, as far as the nature of the articles admit, prepare our medicines with water as a menstruum instead of spirits.”

In the same year the Medical Society claimed to be the guardian of the health of the state's inhabitants. The following preamble and resolution were presented at the annual meeting:

*“Whereas*, The provisions in the supplement of the Act of Incorporation of the Medical Society of New Jersey, passed 1823, the privilege of vending drugs and medicines is extended to merchants and shopkeepers, to the detriment of the profession, and more especially to the imminent danger of the health and lives of our citizens, inasmuch as medicines of a spurious and bad quality are often sold, and even when genuine, by persons totally ignorant of their salutary or deleterious properties, or of the quantity in which they may be safely administered; therefore, be it

*Resolved*, That, as guardians of whatever is connected with the subject of health, it is incumbent upon the Medical Society to present the subject to the consideration of the legislature at its next sitting, and obtain, if possible, a repeal of the provisions above referred to, or such modifications as shall exclude all other regularly licensed physicians from vending by dose or small quantity any drugs principally used as a medicine.”

As the Medical Society was fighting to maintain its very existence during the next 10 years, frequent and repeated attempts having been made by enemies of the Society to have the Act of Incorporation repealed, the fate of the above resolution was not recorded.

An epidemic of cholera spread over the entire state in 1834-35. How earnestly the profession was groping in the dark for the cause of this disease, is shown in the report of Dr. S. H. Pennington, a member of the standing committee and one of the outstanding physicians of the day. In the annual report of his committee, he said: “Of the pathology of this disease, your reporter fears that he cannot furnish any information which will throw additional light on this dark and mysterious subject. The theory is not improbable which refers the disease to an affection of the ganglionic system of nerves. The viscera, which are chiefly affected, are those to which the nerves of this system are mostly distributed, and the symptoms are those which we might expect from the suspension or diminution of their energy. \* \* \* \* \* I have not attempted to argue the question of the contagious nature of cholera in the above account. I have endeavored to present facts with some clearness and fairness, in order that their bearing may be at once seen. Some of the cases described would, perhaps, strongly incline to that doctrine; and those in Whippany, particularly, would not seem capable of explanation in any other way. Still, your reporter is not prepared to admit the truth of the doctrine, believing he has found ample reason within his own experience for thinking that, in numerous instances, it does occur independently of contagious influences.”

Reports of the standing committees over this period of 50 years or more indicate the

most profound investigations as to the cause of epidemics and, as the germ theory had not yet been advanced, physicians were forced to fall back on the doctrine of Hippocrates and Boorhaave; that the heavens, the seasons of the year, the sun, the sea, the mountains, lakes, rivers and marshes, vapors, exhalations and meteors, etc., were the underlying causes of disease.

From 1818 to 1834, the Medical Society of New Jersey gave its hearty support to the movement for official publication of the United States Pharmacopeia.

In the year 1837, Dr. L. A. Smith, the President, read a paper before the Society in which he urged the erection of an asylum for the care of the insane, and a committee was appointed, at his suggestion, to memorialize the legislature on that subject.

In 1853, a resolution was adopted at the Annual Meeting of the Society that, in its opinion, the sanitary laws of the state needed revision, and a committee was appointed to take up this matter with the legislature. Discussing the crying necessity for such revision, the committee reported that it had made a personal study of all laws relating to health of the people of New Jersey from the time of its organization into a government under Lord John Berkeley, Sir George Carteret and Sir Philip Carteret, up to the year 1853, as follows: "The sum of the acts which have been compiled reaches 174 but this does not include a large number relating to the drainage of low and wet lands, which had a vast influence on the health and longevity of the inhabitants of the localities so drained. With all due respect to the wisdom and understanding of our forefathers, and of our legislatures of the present day, your committee cannot but regret that so much time has been taken up with the more moneyed interests of the inhabitants of New Jersey, to the almost total neglect of those measures best calculated to secure health and longevity. Such legislation as this \* \* \* \* is so short sighted we marvel that more attention has not been directed to it. Inasmuch as every year added to the life of man, and every day saved from sickness, is capital added to the resources of the state

equal in amount to the worth of the time saved, the principal accumulating annually and the interest yielding a handsome revenue. If the interests of the state of New Jersey required the enactment of 25 several laws during the years from 1789 to 1848 regulating the oysters in our bays and harbors, surely the health and longevity of man is worth the time to pass *one* efficient law for life preservation."

These opinions were written into our records 78 years ago and yet one might think he was reading the arguments of a statistician of the Prudential or of the Metropolitan Life Insurance Companies, or of the leaders of industry pleading with our legislature today for the conservation of human health as an asset to the state. The report continues: "It is to be hoped that *the influence of this Society* will be sufficient to induce the state to appoint a commission to examine into these matters and draft such an Act as is called for by the spirit of the age. In sanitary legislation, particular regard should be had for school houses and work shops. Throughout our state, children are collected in schools that are too small and badly ventilated. It is scarcely necessary to mention to the medical profession the evils of overcrowding a great number in a small space. Besides the usual deterioration of the air by the mixture of non-respirable air and gases, diseases are propagated that, under the influence of better ventilation, would be harmless. The size of the school rooms, the number of scholars, the ventilation and heating, should be regulated by positive enactment. Every workshop in the state should be under the supervision of the sanitary law. Mill ponds and marshes should be under the supervision of a health officer. Protection against smallpox should be absolutely required by law. In conclusion, your committee would recommend that our Society, through its officers, request the appointment of a commission to report at the next or a subsequent sitting of the legislature."

In 1855, Dr. A. B. Dayton, in a masterly address before the legislature, urging the passage of certain amendments to the Medical



Practice Act, in which he referred to the high motives of the medical profession, finished his address in the following dignified words: "But our motives may be impugned, we may be accused of acting from selfishness or sordidness. \* \* \* \* \* We claim to act from higher and loftier motives nowise akin to base incentives. Independently of these feelings as physicians, we believe in the honor and dignity of the profession and in the improvement of the science essential to life and health. We are anxious that our children and your children and their children's children shall have the benefits of an educated medical corps. \* \* \* \* \* We come before you, gentlemen, not as supplicants for personal or professional favors. We ask nothing at your hands that will not subserve the best interest of your constituents and the world. Let this be accomplished (referring to a proposed enactment to raise medical standards) and you will fulfill the wishes of the Medical Society, the profession and the people."

In 1860, the standing committee recommended the revision of the quarantine laws so as to prevent the influx of disease from the adjoining states of New York and Pennsylvania. In 1862, the Standing Committee recommended the grading of streets in towns and villages. It scarcely seems possible that only 70 years ago the streets in our smaller towns and villages were ungraded. The committee also recommended that supervision of the disposal of sewage be placed under legal enactment so as to control many sources of ill health. In 1860, the sinking of artesian wells was advocated by the committee as a protection of the potable water supply from surface drainage. A few years later, as a result of years of labor and the presentation of scientific facts to the city fathers of the city of Camden, by Drs. Walter S. Bray and Dowling Benjamin, artesian wells were sunk for the entire potable water supply of that city.

In 1862, referring to life among the pines in southern New Jersey, the Standing Committee remarked that return to home by a consumptive who had resided in the pines for a short time was frequently followed by rapid death. Might it not be worthy of thought,

whether a hospital, so regulated as to preserve an equitable and moderate temperature during the winter, within some appropriate forest, would not furnish us with additional means for prolonging life in an affection so utterly hopeless as phthisis? *And this statement was made 44 years before the introduction of tuberculosis sanatoriums at Saranac.*

During the period of 30 years from 1860-1890, the medical profession in New Jersey again and again urged the legislature to bring about enactment of laws for the prevention and control of disease through intelligent sanitary supervision. With no thought of emolument, sacrificing their own time and personal interests, these forefathers of ours in medicine were "a pillar of fire by night and cloud by day", leading the people of New Jersey to a cleaner, more healthy land. No history written in this state up to date gives our profession the place it deserves in securing the adoption of a modern, scientific, sanitary code.

In 1863, the Standing Committee called attention to the crying need for a hospital in Newark, and one old practitioner remarked that it was a pity that in a city with 50 churches there was not a single hospital. Again, it does not seem possible that only 68 years ago, the life-time of a physician, our cities and towns were without any hospital accommodations. In 1866, the first hospital for the care of the insane was erected at Trenton. It had taken 29 years of almost constant agitation on the part of our profession to secure from the legislature, an appropriation for this hospital.

We were under the impression that Dr. Henry O. Reik and the writer deserved the credit for advocating the formation of the first Tristate Medical Conference, but it seems that in this we were mistaken, for in the year 1866, Dr. Woodward, of Connecticut, appeared before our State Society and pleaded for an interchange of medical ideas. He evidently journeyed to Philadelphia on the same mission, for in that year an "annual correspondence" was started between the medical societies of the states of Connecticut, New York, Pennsylvania and New Jersey. We regret that the subject matter of those corres-

pondences has not been preserved, for undoubtedly it would have thrown considerable light on the development of medical science, social and sanitary conditions, and the progress of preventive medicine in these adjoining states.

In 1866, for the first time in this country, *use of the alkaloids of cinchona was advocated in the treatment of malaria*. In the same year Dr. Bateman, President of the Society, reported what was *probably the first attempt at treating disease by intravenous injections*. He referred to the report of Dr. Lorain, evidently in France, as having treated a case of cholera by intravenous injections of water, and the patient made a complete recovery; probably in spite of the injections.

It is of interest to note in passing that in this year, 1866, when the Society was 100 years old, there were only 595 practicing physicians in the state, and 130 cultists, probably a greater proportion of quacks than at the present time.

To show again the sanitary and hygienic interests of the State Society, and to indicate how closely the members at that period were watching the actions of the legislature, in 1866, Dr. E. M. Hunt, on behalf of a committee, presented to the legislature the following resolution:

*"Resolved, That we hereby express our interest in the attention given to the subject by His Excellency, the Governor, in his annual message to the legislature, and herewith utter our conviction that there is much need of such legislation as shall secure in city and country a more general regard to well-understood sanitary principles and practices."*

The entire state of New Jersey owes a debt of deep gratitude to our profession, and especially to Dr. E. M. Hunt, of Metuchen, for the untiring efforts put forth to have the legislature establish a State Board of Health. In this effort, Dr. Hunt was ably assisted by Dr. E. J. Marsh, of Paterson. In a lengthy paper on the subject, read before the Society in 1867, Dr. Hunt said in part: "While ancient Rome had enlightened provisions for the health of her citizens in aqueducts, baths, drainage, methods of sanitary police, which

even yet may excite admiration, and while the most advanced kingdoms in Europe are now paying attention to the science of securement of public health in a way that shows that those who have control of public health can no longer fold their hands and shut their eyes to governmental duty in this direction, it well behooves American legislation so to inform itself upon the subject as to enable it to diffuse such information and provide such laws as shall the better secure the health of the masses."

He drew attention to the fact that the ablest European and American sanatoriums were demonstrating to the public that croup, diphtheria, diarrheal diseases, scarlatina, measles, whooping-cough, erysipelas and puerperal fever are dependent upon local avoidable influences. In a plea to physicians to throw themselves into this work for the protection of the health of the people, apart from the actual practice of medicine, he related the following story.

In ancient history, Arnulph, the son of a physician, was preparing himself for the calling of his father. One day he came to his father and said: "Father, let me go into a cloister and serve God." His father replied: "Thou doest well to serve God. As a physician thou mayest serve Him and thy fellowmen." That night Arnulph had a vision and, lo, there appeared an angel with each hand full of roses. "And why", said Arnulph, "are the roses in thy left hand scentless while those in thy right are full of fragrance?" And the angel replied: "In my left hand are the offerings of those who serve the Heavenly Father without serving his children; in my right hand are the offerings of those who served God and their fellowmen."

As a result of the long persistent labors of Drs. Hunt and Marsh, *there was created by the legislature, in 1877, a State Board of Health*, and Dr. Hunt was its first President. The state of New Jersey owes an undying debt of gratitude to those two physicians and we revere their memory for having been instrumental in bringing about what was possibly the greatest accomplishment of the Medical Society of New Jersey in the long years of its existence.



In 1872, a law was passed, as one result of a plea by the profession, *making abortion a criminal act punishable by heavy fine and imprisonment.*

In 1878, Dr. H. R. Baldwin, in a presidential address, *first called attention to the probable spread of contagious diseases by milk.* In the same address he advocated the absolute exclusion from schools of all children from houses where scarlet fever, measles, diphtheria or whooping-cough were known to exist. He also advocated, for the first time, placarding of the premises where contagious diseases were known to exist. These 2 recommendations became the very heart of the sanitary code in reference to the spread of contagion. Dr. Baldwin's essay is one of the most remarkable ever read before our profession.

In the year 1879, Dr. C. F. Deshler, of Hightstown, read an essay on "The Medical Profession and the Public Health", opening his address in the following words: "The lowest conception of the office and work of the physician is that which includes only himself, his patients and his fees. The highest is that which leads the practitioner to view the most minute events of his professional life as directly connected with all medical and sanitary science and of interest not only for the profession but to humanity."

We wish this statement might be found engraved on the heart of every physician.

Further on in the address he said: "The healer is still a God and Hygeia is his child." I wonder if he foresaw that "Hygeia", typified as the popular publication of the American Medical Association, would be carrying instruction for mothers into the homes of the growing generation.

In the spring of 1879, a law was passed *establishing the Bureau of Vital Statistics*, and Dr. E. J. Marsh, grandfather of our Dr. Marsh, of Paterson, who was at that time the second President of the Board of Health, did much to establish it on a sound foundation by securing coöperation of the profession in carrying out its provisions.

In the address of Dr. Deshler, referred to a moment ago, the doctor went on to say:

"For years the profession had stood as supplicants begging for the simple crust of facts and figures, hard and dry in themselves but rich in latent wealth of elements for the cause of science. We have long importuned the legislature for this legislation. At last we have succeeded. (Referring to the establishment of the Bureau of Vital Statistics.) In our large cities no sooner does an abnormal death rate appear upon the reports than the Board of Health decides upon measures for the immediate arrest and removal of unsanitary conditions which cause the destruction of human health just as an efficient system of police regulation would arrest suspicious characters believed to meditate the commission of crime. Discovery of the transmission of scarlet fever through milk, typhoid fever, through drinking water, severe intestinal diseases through impure ice, are important instances of the success of our statistical methods of observation."

In 1874, the New Jersey Sanitary Association was formed. It consisted of physicians, health officers, sanitarians, engineers and lay members. As the years went by this Association served as an interested body between the profession and the laity and called attention of the public and the legislature to further necessary sanitary reforms.

In 1890, the medical society appointed a commission of which the late Dr. Henry L. Coit, of Newark, was chairman, to make an exhaustive study of the problem of milk supply and its protection. Dr. Coit had been deeply interested in the problem for many years. In 1909, he was instrumental in having legislation passed defining and safeguarding "certified milk". *A medical milk commission was formed in New Jersey and now there are over 100 such in America and many in Europe.* Care in the production, handling and distribution of milk has been placed on a basis never even dreamed of before. The supervision of herds, the testing of bovine tuberculosis, the medical examination of all employees, the supervision of dairies, the scientific study of milk ingredients and their proper proportions, the bacteriologic examinations, the scientific erection and supervision of the enormous number of physical

plants utilized by our national milk supply firms carrying on one of the nation's greatest businesses in food supply, have now become some of our most potent factors in preventive medicine. So thoroughly was this work planned, even to the most minute detail, that no change has been made in regulations or requirements in 30 years.

While we may be too close to Dr. Coit's great life work and history to view it in its proper perspective or to realize fully what he accomplished to preserve the lives and health of the children of the world, we believe that in time New Jersey will be credited with having added another name to the group of immortals to which Jenner, Lister, Koch and Pasteur belong. The subject matter of this investigation will be referred to at length in our forthcoming History of Medicine in New Jersey, for ours was *the first state in the Union to adopt a standard for certified milk*.

In the same year, Dr. Edgar M. Holden read a paper before the Society on "The Potential Factors in the Spread of Tuberculosis". In 1893, the following resolution was adopted: "*Whereas*, the Medical Society of New Jersey considers it absolutely important that this disease (bovine tuberculosis) be completely suppressed because of the danger of its transmissibility to the human subject; *Be It Resolved*: The bill framed and presented by the committee appointed by the Medical Society of New Jersey has its full approval and endorsement; and *Be It Resolved* that the legislature of New Jersey be requested to pass the bill at its earliest opportunity."

In 1895, Dr. Alexander Macalister, of Camden, reported a series of 25 cases of diphtheria treated with antitoxin, and Dr. Godfrey, of the same city, added 4 more, making a series of 29 cases so treated with only 2 deaths. In the same year the following resolution was adopted by the State Medical Society:

"*Whereas* the welfare of a large class of unfortunate fellow citizens should, in our opinion, be paramount to any consideration of mere economy; therefore,

*Be It Resolved*, That this society hereby records its sorrow and regret that the Gov-

ernor of our state withheld his signature from the bill passed by both Houses of the Legislature authorizing the formation of a colony for epileptics; *Resolved* further that we will use our best endeavors to bring about the enactment of another bill in the hope that it may meet a better fate, and thus ameliorate the condition of a large class of unfortunates.

In 1896, Dr. Elmer, the President, in his annual address, said in part: "It is the prerogative of the physician as a sanitarian to lend his influence and education in efforts to the correction of such evils (unhygienic methods of living and lack of educational efforts on the part of those well informed to instruct the ignorant) and we rejoice to know, and to the credit of our noble profession be it said that, the world over, the foremost and valiant leaders in the great battle against preventive disease, at no matter what sacrifice of effort or skill and even counting their own lives in the contest, are physicians. Can you tell me of any other profession or occupation where self-interest, self-enrichment, self-glorification is so universally and unhesitatingly sacrificed to the public weal as is that of the philanthropic physician? No. In peace and war, in pestilence wide-spread, or in the silent chambers of the humble home, his aim is the preservation of others, the abnegation of self, the protection of the community and often his own sustenance is the price paid for his efforts."

It will be seen that during this period of 40 years the entire profession in our state was class conscious in the great matter of public health. That they were the far-seeing leaders of thought in this matter and that it needed constant prodding and repetition of effort to persuade the legislature to so educate itself as to follow in their footsteps and enact the legislation so urgently petitioned. In 1898 the society recommended to the legislature the enactment of a law which would effectually prevent defilement of the water sheds, streams and lakes which were at the time in use for the collection of potable waters.

In the same year, legislation was recommended which would establish and maintain



suitable medical supervision of public schools. Two years later, such a bill was passed and *New Jersey had the distinction of being the first state in the Union to adopt such a measure.* This Act provided that a Board of Education might exclude from schools, children who had not been vaccinated against smallpox, and some years later another bill was passed making it compulsory upon parents who objected to vaccination and had their children excluded from the schools, to provide education for them at their own expense.

This bill referred to above also made specific provisions for the heating, lighting, ventilation and other hygienic conditions in public schools.

In 1901, after a long heroic struggle, a bill was passed by the legislature providing for the erection of a state sanatorium for the care and treatment of those suffering with tuberculosis.

In his Presidential Address, in 1901, Dr. Henry J. Mitchell said among other things: "In New Jersey the foundation for guarding public health was laid by the Medical Society of New Jersey when it began the agitation which resulted in adoption by the legislature of a permanent system for the collection and preservation of records of births, marriages and deaths. In 1866, the legislature appointed a state sanitary commission composed of Drs. Coleman, Cooper, Ryerson, Nichols and Hunt, all members of this society. The report of the commission recommended the enactment of a comprehensive Act for the protection of public health but no further action was taken by the legislature until 8 years later, in 1874, when, again in response to requests by this society, an Act was passed creating a State Health Commission of 6 members, 5 of whom were members of this society. The report of the inquiries and investigations made by this commission drew attention to the preservation of life and the prevention of sickness which would be effected in New Jersey by the application of measures for isolating persons affected by infectious diseases; for the prevention of the pollution of public water supplies; for systematic removal of waste substances; for the pre-

vention of sale of unwholesome food; for the abatement of nuisances; and for such other public service as it should from time to time be found appropriate to assign by legislative enactment, to a department of public health; and in 1877, as a direct consequence of the recommendations of this society, an Act was passed establishing state and local Boards of Health."

It took more than 23 years to persuade the legislature to adopt this measure.

It is the writer's belief, although he has not had time to make the proper investigation, that New Jersey was among the very first states in the Union, if not the first, to establish, by law, state and local Boards of Health. A quotation from an article appearing at this date is as follows: "Until the close of the eighteenth century, and during several decades of the nineteenth, almost the only public health legislation which was enacted in the American Union consisted in a few statutes relating to smallpox, since that pestilence was scarcely ever absent from any city for many years at a time, until after the general introduction of vaccination." Quoting again from the address of Dr. Mitchell: "Since the opening of the laboratory (for examination of tissues and sputum), the examination of specimens forwarded by physicians has proceeded without interruption. At the beginning of this work it was found that an order of the Postmaster-General prohibited transmission through the mails of all diseased tissues, *and to New Jersey is due the credit of successfully demonstrating to the postal authorities the safety of such transmission when specimens were properly encased.* A new order was issued by the Post Office authorities, permitting the use of the mails for this purpose."

The discovery by Koch of the tuberculosis bacillus in 1882, gave the world a working knowledge of tuberculosis and consequently there were rapid developments in its control and prevention. Sanatoriums sprang up, first in Switzerland, then all over the world. Our own Dr. Edward Trudeau, while engaged in practice in the city of New York, developed pulmonary tuberculosis and decided to try the

sanatorium treatment on himself, in the Adirondacks. Regaining his health to a large degree, he started a small sanatorium for others, at Saranac. This was in 1884, and it was the starting point for the rest and sanatorium treatment in America. In a few years Saranac was known all over the world.

It was not until 1907 that our New Jersey State Sanatorium was erected at Glen Gardner. For a number of years the medical profession had been interesting lay groups all over the country in the formation of tuberculosis associations, resulting in the formation of the National Tuberculosis Association in 1904. In 1906 the New Jersey Association for the Relief and Prevention of Tuberculosis was organized. A thorough, systematic plan was adopted, providing sanatorium treatment for the incipient, hospital care for the advanced, dispensaries where individual cases could be examined and patients advised how to live, visiting nurses to see that the advice given was carried out at home, medical inspection of the school children, education of the public through exhibits, lectures and distribution of literature, and enforcement of the anti-spitting ordinance. By 1908, 21 local committees had been formed in different sections of the state. In that year the State Board of Health adopted a set of aphorisms on how to keep well and avoid tuberculosis. These were placed on charts and issued with a circular on "How to Drill Children", and were sent to 11,000 schools in the state.

In 1910, a bill was introduced in the legislature to permit counties to erect hospitals for the treatment of incipient and advanced cases, and 2 years later the bill was passed and became a law. I mention this lapse of only 2 years to indicate that in these later years, due to the education and diffusion of ideas by the medical profession in regard to communicable diseases, it was much easier than theretofore to secure coöperation of the legislature.

In 1911, a law was passed *abolishing drinking cups in schools and public places* and an appropriation of \$10,000,000 was given by the legislature to the State Board of Health to combat tuberculosis. In 1912, a statutory pro-

vision was enacted for the compulsory removal to hospitals of careless and indigent patients. This is a brief report of the accomplishments to date. Much yet remains to be done and there is a crying need for state preventoriums for children. This coöperative work has cut the death rate of tuberculosis by probably 50% and a large number of cases has been uncovered which never would have been found or treated except for this state-wide supervision. I am indebted to Mr. Easton, Secretary of the New Jersey Tuberculosis League, for the data submitted above.

The first President of the New Jersey Association for the Prevention and Control of Tuberculosis, and the first President of the Board of Managers of the Hudson County Tuberculosis Sanatorium, was our revered Fellow, Dr. Gordon K. Dickinson, who has joined the galaxy of our illustrious forefathers in medicine in the Great Beyond. New Jersey should place his name at the top of the honor list of those in our profession who, through the past half century, have labored for the welfare of humanity in this state.

It will be my pleasure to introduce a resolution at the Annual Meeting of the Medical Society of New Jersey this year providing that this body place a suitable tablet on the walls of the Glen Gardner Sanatorium commemorating the work of Dr. Dickinson in the prevention and control of tuberculosis.

This report on tuberculosis has carried us a little afield of our chronologic arrangement. To resume this, in the year 1900, a law was passed providing for the medical examination of public school children and again New Jersey was the first state in the Union to adopt such a measure.

In 1903, an Act was passed by the legislature prohibiting spitting on the floors of passenger cars.

In 1908, at the instigation of the Medical Society of New Jersey, the legislature appointed a commission and made an appropriation for the extermination of mosquitoes, and, compared with the vast number of these disease spreading pests formerly present in the state, we are now comparatively free from the spread of disease by this method.



In 1910, the activities of the Medical Society of New Jersey drew the following remarks of appreciation from Governor George S. Silzer: "Your society is doing splendid work in New Jersey in raising standards which must necessarily eventually result in public good. There is much important work to be done in public health matters in New Jersey, in which the advice and coöperation of the physicians are important and essential, and I trust that your body will continue its good work along these lines."

In 1914, a committee of the State Medical Society was delegated to standardize the hospitals in the state. Again this work was done in New Jersey before it was adopted elsewhere. Indeed, the American Medical Association and the American College of Surgeons took a leaf and a brief from the work of our medical society in adopting this plan at a later date.

In 1916 a law was enacted for the control of ophthalmia neonatorum and the Bureau of Vital Statistics made it compulsory to designate on birth reports just what preventive measure was employed in each individual case.

In 1917, a law was passed making the report of venereal diseases compulsory. In the same year an enactment provided for the annual registration of midwives.

In 1924, the state society went on record favoring periodic health examinations. In the same year the Medical Society of New Jersey made a radical advance in preventive medicine. Without any appropriation from the state and at an annual expense of \$10,000 a year, the society, through the efforts of Dr. Wells P. Eagleton, secured the services of an Executive Secretary to carry to the public, through various clubs, associations and welfare groups, medical education in matters pertaining to health.

From its very inception the plan met with unqualified success. After a trial of 2 years, the demand upon the time of the Executive Secretary became so great it was necessary to secure the services of a Field Secretary to carry on this work. At the time of this writing, these health talks have become so pop-

ular that over 60,000 people are listening to the lectures and it is almost impossible for the Field Secretary to meet the demands upon her time.

In the same year Dr. Henry O. Reik and the writer conceived what they thought at the time was an original idea in creating the Tri-state Conference, wherein the Officers and Editors of the State Medical Societies in New York, Pennsylvania and New Jersey would meet 3 times a year to confer on all medical matters of interest to the profession in these 3 adjacent states. Representing as we do, 25% of the population of the nation, and 24% of the physicians in the country, the opportunity for accomplishing far-reaching results is indeed great. And even the work of this important conference has largely turned to public health matters.

In 1927, a law was passed providing for the protection of the health of labor in factories. It made mandatory fire escapes, guards on machines, dust removing devices and the control of noxious and deadly gases and fumes. Dr. Andrew F. McBride, the Commissioner of Labor at that time, was largely responsible for this enactment. He also established Rehabilitation Clinics over the state where injured employees could be treated and brought back into productive activity so as to lessen the burden on the state.

In 1928, an attempt was made by the society to have enacted legislation for the control of rabies. In this, however, we were unsuccessful.

In the same year, the society gave its hearty support to plans and arrangements for a commission appointed by the Governor of the state to make a survey of our crippled children, and this year we have gone on record favoring the permanent appointment of this commission with the provision that a physician, chosen by the State Medical Society, be made one of its members. Formerly we had fought for years to have medical men appointed on these important state bodies and commissions, without success, but this year the necessity for medical representation on this particular commission was readily appreciated.

In 1928, a law was passed, largely through the efforts of Dr. Henry B. Orton, of Newark, providing for poison labels on all preparations of lye placed on the market.

In 1929 and 1930, the Medical Society of New Jersey put into effect a plan to immunize all school children in the state against diphtheria by the administration of toxin-antitoxin. At the close of 2 years' aggressive action, in conjunction with the state and local Boards of Health, and with the active assistance and coöperation of the Prudential Life Insurance Company, and the Metropolitan Life Insurance Company of New York, and the financial assistance of some public spirited friends, we believe that about 500,000 children have been so protected. We are now attempting to have all preschool children given similar protection. If we could only secure coöperation of the parents, diphtheria would be wiped out of the state.

In this survey of what the Medical Society of New Jersey has accomplished in the last 165 years, in the advancement of preventive medicine, and to bring the subject matter within the confines of a single paper, it has been necessary to hurry over the field. A whole volume could easily be written on the subject.

At the present time when platform speakers, soap-box orators, the press and many of the influential first-class periodicals in the country are freely criticising the medical profession, it has been with profound satisfaction that the material for this paper has been collaborated. We have demonstrated conclusively the high place the Medical Society of New Jersey, and the entire profession in the state, has always held in constructive advancement of public health.

We have indicated how we have led and how the legislature has been painfully slow to follow, how we have been compelled to wring from that body consent to put into legal enactment the measures we have so earnestly advocated for years.

Massachusetts was the first state in the Union to adopt a proper law for the disposal of sewage. New Jersey was the second state to do so. We were among the first to estab-

lish a State Board of Health. We were the first state to adopt measures for the medical examination of school children. We were the first to adopt a standard for certified milk, the first to secure from the federal authorities permission to send tissues and specimens through the mail to central laboratories for examination, the first state to standardize its hospitals, the first state to place all private hospitals under state control, the first to provide for mosquito extermination, and among the first to enact a law for the prevention of ophthalmia neonatorum.

This is indeed an enviable record of which we may be justly proud.

I cannot close this article without giving credit to the State Board of Health, to the Board of Health of the City of Newark, and particularly to Dr. Julius Levy for their excellent work in preventive medicine. This field as outlined by them covers:

Prenatal care of expectant mothers, supervision for one year of babies delivered by midwives and in wards of hospitals, Little Mother's League at each school, consultant stations with 18 conferences each week in schools, supervision of midwives, supervision of day nurseries, wet nurses' directory, prevention and supervision of ophthalmia neonatorum, detection and cure of syphilis among supervised babies, housing, sanitation, poverty, unmarried mother's problem, supervision of children to school age, convalescent homes for mothers, obstetric out-patient department, municipal school of midwifery and establishment of children's dispensaries in congested areas.

Since the introduction of the above measures, the infant mortality in the City of Newark has fallen by leaps and bounds, and last year the City of Newark was credited with having the lowest infant mortality of any city of its size in America.

We believe that in the future, as in the past, our profession, acting through the efforts of the Medical Society of New Jersey, and in its contact with the public, will continue to follow in the foot-steps of our illustrious predecessors, demonstrating to the world at large that our first and foremost duty and pleasure is the service of mankind.



## THE PRACTITIONER'S VIEW OF MEDICAL ECONOMICS

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Practically every young man who enters the profession of medicine does so primarily because of an urge to help his fellow man. Very rarely does any one consider this profession as a means to amass a fortune or to acquire social prestige. The road is too long and tedious for the fortune hunter. I have yet to meet the man who has taken up medicine except for love of the work. He takes it for granted that he will make an ordinary living in the course of time, but nothing more.

After a short period in practice, certain hard economic facts, from which there is no escape, are forced upon him, and he comes to the rude awakening that money governs his practice almost as much as it does every other business or profession. When he begins to realize this, and couples it with the disappointment he normally feels when his patients cannot be cured of many of their desperate illnesses, and then get well of their minor illnesses without assistance, he is likely to become pessimistic or cynical about his life's work. Furthermore, he is reading at present all kinds of attacks, in all types of magazines, on the charges of doctors and the cost of illness. Everybody seems to be trying to accuse the medical profession in terms, veiled, polite, or otherwise, of being highway robbers. One would think we are taking bread from the hungry, and that we are akin to the barons and bishops of medieval times. Medical costs are being investigated by amateur sociologists from the automobile manufacturer to the chain store groceryman. No automobile manufacturer suggests that people buy fewer or cheaper automobiles, and no chain store owner suggests that poor people eat fewer luxurious foods, wear plainer clothing, and live on the humbler fare of their forefathers. These are all in the line of civilization and progress, and are legitimate expenses. They argue that x-rays, blood chemistry, immunization against disease, are also

in the line of progress, *but* that they should be given away or else paid for by some panacea of a system whereby everybody pays for the other fellow; distribute the cost by taxation, by public foundations, by public clinics, by any method you wish so long as the individual is hood-winked with thinking *he* is not paying for it.

All these lay articles assume certain premises.

First, that medical charges are too high for the average worker. This is not a new slogan. All of us, who have been in practice any length of time, know that this has been said from the beginning. One man cannot pay because he has too many children, another because he is out of work a few months. He may have an automobile or a radio on the installment plan; that is a legitimate expense. Watch the construction of any building and see the laborers arriving in much better automobiles than the average doctor drives. Go into their homes and see better radios than we possess. See fruits from all over the country on their tables. Who wears cotton stockings and underwear? These are hard facts. Yet, they mean nothing to the economist who would socialize a legitimate profession. *They* do not give free groceries, or free coal, or even a discount to those who say they cannot afford to pay, and yet those commodities are just as important to sustain life as is medical care. If one asks for charity in any other line except medicine, the whole social machinery is set to work to find out if it is a worthy case; if so, then only the minimum amount of help is given. But the doctor or the hospital must ask no questions, refuse no help at any time, for fear of hurting somebody's feelings or of being accused of being hard-hearted. Everything must be done as if the patient were conferring a favor. Any physician can give innumerable illustrations of this condition.

Another argument advanced is, that doctors should reduce charges by coöperation and combination in group partnerships and clinics; that specialists should so combine that their knowledge is available at a lower fee. At the head of such a group should be some one who will summarize a patient's condition

and decide which of these specialists the patient should see. Not one of these men will know or study the patient as an individual. Any one of you who has talked with patients who have been through such a mill, knows the mental confusion, frequently depression, and discouragement which results. Pity the poor patient who has a soul as well as a body. We are not running an assembly plant or a parts factory.

The individual does care who takes care of him or his family. The higher the mental and emotional development, the more intense is this attitude. Faith in the ability and integrity of his physician is the keystone on which he builds. When you have been away on vacations, and on return have had patient after patient report that he waited for you rather than go to a stranger, you realize the importance of this bond. This is the compensation to you for the fickleness and lack of loyalty of many others. When anxious relatives and well meaning friends suggest to the patient—why don't you try this doctor or this quack who has done such marvelous things for someone else?—and the patient still stays loyal, the very last thing the doctor thinks about is the financial return from that patient.

Public health programs seriously cut the doctor's income. There are public health nurses, insurance nurses, Red Cross nurses, school nurses, and so on. All these nurses are doing some prescribing of diets and treatments, and are treating minor injuries and sicknesses which would normally be brought to doctors' offices. We have no quarrel with proper, legitimate nursing but we are beginning to appreciate the economic injury which is being done, particularly to the younger practitioners.

Every community has its diphtheria prevention program. Children are immunized by public health organizations without any question as to the financial status of the family. This is a purely individual health measure paid for by taxation. Now, after people have become accustomed to this system, state boards of health are making a half-hearted endeavor to persuade people to go to the fam-

ily physician for early immunization. Patients ask why they should pay when the school or board of health will do it free. If immunization is part of a public health program, make the matter compulsory and carry it through to its logical conclusion. Do the same with smallpox vaccination, with scarlet fever, with typhoid. A public health measure paid for by taxation should leave no freedom of choice to the individual. If my taxes are paying for immunization, I have a right to demand that everybody's child, and, for that matter, every non-immune person, be immunized. There is no other way in which the state can logically serve the community. The public health program should protect the individual only so far as he is part of the whole, and in respect to his status as a menace to others.

In line with such public health programs, large industrial corporations are taking care of their employees and even their families in a paternalistic manner. Wage earners, whose salaries are adequate for all necessary comforts and some luxuries, are given the impression that medical care costs nothing. Consequently, when they do have to pay a physician or surgeon what his work is worth they feel they are being imposed upon. They have not been taught to respect either the physician or his knowledge.

There is also a tremendous abuse of the *free clinic*. Practically no investigation is made of the social status of clinic patients. For a mere pittance, many dollars worth of service is given away. Young doctors are exploited to give their services under the delusion that they are being honored by having a position on the staff. So wonderfully organized is this system that crowds of men wait for the opportunity. Fortunately, doctors are gradually realizing this injustice, and a movement is under way in some of the larger institutions to pay the doctor something. Let us oppose vigorously the establishment of unnecessary clinics, particularly in our suburban hospitals. Let us demand that clinic cases be true clinic cases from the economic view, and that the recipient of public charity prove his need.



They tell us to consider the wonderful care that patients receive in the wards and clinics of hospitals; that the poor receive better treatment there than most receive at home. Undoubtedly, they receive the best scientific care that we are able to give; they are analyzed and studied and treated as pathologic conditions. The attending physician directs, the resident intern over-sees, and the nurses carry out the orders. This is all done in a cheerful, efficient manner, but the patient as an individual means little, and the doctor would pass him the next week on the street without knowing him. In my work as a pediatrician, I encounter the greatest resistance in getting parents to consent to hospital medical care for infants and young children. They appreciate that for surgery there is no other solution, but for medicine they will do almost anything to keep the child at home. Many are the charity patients that I have taken care of in my office, when I am not on service, because children have been brought to me for my individual care. I cannot persuade those parents that someone else on the service will take just as good care of the child. The emotions are more powerful than the intellect, especially with those whose training has been elemental.

Moreover, the greater the economic independence, the more patients will insist on this freedom of choice. Naturally, if one can afford to pay for individual service, one is going to obtain it if possible. Why deny this right to the worker, if he wishes it, any more than the financier?

In a consideration of the amount of pure charity work that a physician should do, we cannot judge the present by the past. When communities were stabilized, when the population was not in a constant state of flux, the physician knew who was worthy of charity and who was not. Today we can only guess at individual wealth. The easy-going physician can be unmercifully imposed upon. Fortunately, most people are self-respecting and honest and do not need investigation—they wish to pay fair fees for individual service. We do not need to ask for references when they open an account. The experienced

physician can quickly recognize a "dead beat". Our worthy charity work is actually a pleasure because it entirely satisfies the original desire we had to help people. However, we can go on the general assumption that in this country charity to unknown persons is not necessary, and that at least some fee is in order. I have found that those who expect charity without question, as if it were their right, are usually most ungrateful and are social parasites.

The controversy as to what is a charity case frequently causes ill feeling between doctors and social workers. The social worker is paid for her services and actually gives nothing; she literally is not doing charity work herself although given credit for it by the people. Her judgment is very likely to be biased in favor of the applicant, partly because it is a normal sentimental feeling and partly because her records of the amount of work she has done will determine her value to the organization employing her. When a physician is employed by a similar organization, or by the city, he also is paid for his services and cannot be considered as doing charity work. Most of the free work in a community should be cared for in this way. When the hospital is asked for free services for a patient it should be entitled to a full history of the situation so that it can decide for itself whether or not the case is worthy. It should not be expected to take the word of a social worker not under its employ. The hospital is responsible to its staff not to do promiscuous charity work. A patient having been accepted by the hospital should not be questioned by the physician. If, as happens occasionally, he is imposed upon, the hospital authorities and not he should make the investigation.

We doctors sometimes make the mistake of assuming the principle of pay a full fee or pay nothing. This is embarrassing to the honest poor who are thereby encouraged to go to clinics where they feel they can maintain their self-respect. It is not beneath our dignity to tell a patient what our regular charge is, but that if he cannot afford to pay it we are perfectly willing to adjust it according to the

circumstances. This is real social service, and the respect of both parties can be upheld. I do this regularly where my instinct tells me it is necessary, and I am very seldom imposed upon.

The cost of services to the consumer is governed by economic laws; production and distribution costs apply to everything. They also apply to medicine. There is no medical monopoly. Individual competition obtains as in any business.

The cost of a medical education, as in any profession requiring specialized knowledge beyond high-school training, is borne first of all by the parent of the student. He must invest thousands of dollars in a most hazardous investment. We may say he is doing it for love of his child; nevertheless it is an investment from which he expects that child to receive a commensurate return.

The student invests his freedom up to the age of between 26 and 30 years. During that time he is not free to do what other normal young men are doing. He has no financial independence, he must ask for everything he has, he may not enjoy free evenings, he may not marry, he may not seek a change of occupation without losing everything previously invested. When he graduates from his hospital he has absolutely no capital investment and no income. This at a time of life when most men of his age have homes, family, and secured positions. What return can he expect for this?

First, he has the personal satisfaction of belonging to one of the oldest and most honorable professions in existence, the annals of which are filled with sacrifice and heroism far beyond that of any other profession. This will give him courage to withstand many a temptation, and to hold his own against discouragements and fears which few even dream of. It is his personal religion.

Secondly, he has the opportunity to know and study human nature from its heights to its depths. This gives a wide tolerance, and a sympathy which makes all men brothers. He hates sham and loathes hypocrisy. He is not afraid of death. He develops a faith which makes him secure beyond church and creed.

Thirdly, he has the satisfaction of looking forward to a useful life so that when he leaves the world it may have been better for his having lived. This is his immortality.

You may argue that he will have all this under socialized medicine. He will not! Everything hinges on intimate personal contact between him and the patients who trust him voluntarily, and who do not come to him merely as to a vender of knowledge. Without such patients, his whole career is a failure.

But none of these things, however personally glorious, will pay his rent, clothe and educate his children and give him material returns to which, economically speaking, he is entitled.

What monetary return for this service as a general practitioner must he require? We will take it for granted that his income should be adequate for a normal life for himself and family. For the present we will not consider the charges of the expert or specialist. We cannot judge the necessary income of any professional man, lawyer or engineer, by the charges of the few highly paid consultants. I am writing of the rank and file. There are certain fixed overhead expenses which cannot be avoided. An office is the first essential. There seems to be a popular idea that because many doctors have taken part of their homes as offices, there is no expense attached. If the doctor has his home and office combined, he must of necessity, in order to be accessible, live in a section of his town or city which is devoted to business. He either pays more for his property or pays higher rent. This means also that he cannot live in an environment congenial to himself and family. They are to that extent socially isolated. This affects his children in the choice of their associates. If he does not have his office in his home, and I believe that no doctor should be compelled by finances to do so, he has the same overhead to consider as any other business or profession. He must pay additional office rent.

Included in the office, no matter where situated, is the cost of equipment, which, if complete, mounts into the thousands of dollars. The time is long past when a medicine satchel



and a stethoscope are sufficient. They have gone the way of the oil lamp.

He needs an office nurse or secretary. Someone must be present for his examinations, or he is in danger of being black-mailed by some hysterical or malicious woman. Someone must answer his telephone all day; this is not the family job, and if he has evening office hours he must pay extra for overtime employment. The curse of the home office is the evening office hour and the Sunday office hour. I have always maintained that these are seldom necessary, except for emergencies. There is no more reason why patients cannot come to the doctor during the day, than that they cannot go to the dentist, to the lawyer, or to the merchant. If these men kept their offices or stores open in the evenings and Sundays, people would seek them at those times also. If doctors as a whole would discontinue this practice, they would be more respected and would have happier families. Patients would make it their business to come at the proper time. A physician has just as much right to charge extra for evening work as any laborer. What other profession works from 8 a. m. to 9 or 10 p. m.? Patients say they cannot come at other times—but what they mean is that it is not convenient for them. Conveniences of this type should be paid for.

Then there is the automobile—a necessary expense and a heavy one. His business car should not be confused with the family car. His family is entitled to its individual car as much as is any other family, and the 2 machines should be reckoned entirely separate.

Other necessary expenses are vacations, when income ceases completely—time off is a total loss. Salaried executives and clerks receive vacations with pay—not so the doctor. Merchants have clerks—few patients want the doctor's assistant, if he has one. The same rule applies to his own periods of illness.

As he grows older and his knowledge and skill increase, he is physically unable to do so much work, but, let him refuse a silly night call on the basis of decreased physical endurance, and he is likely to lose a family.

Patients say they don't want a doctor who does not make night calls. This hurts his practice among new people.

All this time he is not building up a saleable estate or business. He can never retire and still maintain a financial interest. His practice cannot be sold; it is worth nothing to any one else when he dies. His investment is gone into thin air. Try to sell a professional man's equipment, and see what it is worth.

A very serious obstacle to low medical fees is the competition by the horde of quacks allowed to practice their cults. Every physician's income has been hurt severely by the amount of work they have taken. No one objects to honest competition; it is a healthy economic law. The objection is based on the inadequate training, the blatant pretenses and the charlatanism with which cultists claim the right to treat humanity, and the audacity with which they seek to undermine the progress of science. One could even pardon this on the plea of ignorance if they did not seek to abandon their cults, and enter medicine and surgery by the back door, while still retaining their clients who have come to them in blind faith. A loss in volume of work done must be compensated for by a rise in cost if the work is to continue. As long as the legislatures fail to protect those to whom they have given the responsibility of public health, this result must obtain.

These are some of the reasons why medical costs, as applied particularly to physicians, cannot be reduced. The question follows—what should the individual physician charge over and above the actual cost of practice—in other words, what should his profits be? His charges are fixed to a certain extent by the community in which he lives. Where money is plentiful, and worth less to the individual, all costs are higher proportionately than in a community composed of laborers or clerks, where the dollar has a higher value. Therefore, the same services will command different returns in one section than in another. Most physicians have a mixed clientèle. If he charged his minimum cost rates to all, he could not do enough work in a day

to make a living commensurate to the value of the services he gives. The wealthier the individual the more detailed attention he demands and the charge must be in proportion. One cannot treat this class with a quick business-like precision. For the time alone consumed, one visit may be worth 3 or 4 times as much as another. Therefore, I do not believe that physicians should be classified as charging so much for an office or house visit. When people ask me my fee, I always reply "it will be in proportion to the services rendered". I have a minimum charge adjusted on a cost basis. These charges are not fixed from year to year any more than the price of any commodity is stabilized.

I believe that telephone consultations should be charged for. I go on the basis of  $\frac{1}{2}$  the office fee, having found that many were abusing the privilege of asking for advice over the telephone, when without telephone facilities they would have come to the office. This does not mean that every simple question asked by telephone is to be classified as a consultation. The physician should reserve the right to make his own decision. If you will keep a record, you will be amazed at the amount of free advice you give this way, whereas it should be a legitimate part of your income.

Night calls should be charged for properly. Broken rest interferes with one's efficiency the next day. A night call means at least 1 hour, besides the fact that one can rarely sleep soundly again for the rest of the night. Double the day fee is by no means sufficient to compensate for this. Proper charges for night calls will eliminate at least 75% of them. The family will call the next morning and say: "Doctor, I wanted to call you last night but hated to disturb you." You know what they really mean is that they considered the cost and decided to wait until morning.

Charge also for experience. The man who has been in practice 20 years knows proportionately more than the recent graduate. If he has kept abreast with medical progress his judgment is worth a great deal. The experienced engineer or lawyer expects to be paid for his knowledge, the young engineer

or lawyer obtains less. The same standard should obtain in medicine. Patients would then more frequently consult the physician expecting to pay for his knowledge. How many times do you hear the remark: "I want the best doctor or surgeon I can get." A great deal of our work is routine, and can be done by the average man.

Some patients seem to take a certain egotistic pride in telling whom they have consulted, a certain professor or specialist, and they come to you as a suburban doctor as if they were doing you a favor. They want what they call "a complete examination". This is to be done in 1 visit and an ordinary office fee charged. Do not be bluffed by this type. Tell them frankly before you begin what such an examination means and what it will cost; let them know that your knowledge is worth something also, and just because you don't happen to care to live in a big city does not mean that you know less medicine.

There is another type of family which expects to have two or more members taken care of for the same cost as one. The doctor is in the house, therefore, ask him questions about as many as possible. I remember particularly during the influenza epidemic in 1918, when we were taking care of whole families, that there were many complaints because each individual was charged for. Except in case of poverty this should be done. There is absolutely no reason why it should not be so.

Fees in proportion to the responsibility of a case are also reasonable. The law takes cognizance of the relative value of a life; i.e., the workman's life is not as valuable as the capitalist's. The same has obtained in medicine from time immemorial. You may treat one case of pneumonia at so much, and another at an entirely different fee. You do the same in surgery and obstetrics. The question was asked me—"How can a doctor determine what is fair?"—and I replied: "By the family's scale of living and social status." My friend thought that fees should be fixed as railroad fares are fixed; and that the same law should obtain in medicine—either do without if you can't afford it or obtain cheaper services. He did not think it fair that the



individual doctor should have a sliding scale of charges. I said: "We are operating on your daughter and the operating fee will be so much; now, shall I refuse to operate on your gardener's child because he cannot pay that amount?" He could not but feel that he was being over-charged for the sake of the poorer man, and that it was not up to me to compel him to help make up the difference. There is some justice in this view; it is hard for a business man to think otherwise. In an endeavor to stabilize fees for people who think this way, some hospital staffs have agreed on certain charges for specified operations irrespective of the financial status of the individual. If the doctor could be sure of being paid for the full value of his services, as in any business transaction, I think this arrangement, if it were possible, would be satisfactory to a great many of us. None of us are satisfied with the constant financial uncertainty about what to charge.

The proportion between the income of the specialist and the general practitioner is a cause of unrest. Specialism has been overdone; it has become a habit for the public to seek the specialist before the family physician. There are several reasons for this which ought to be corrected.

First, the general practitioner has forgotten that he ought to take care of at least 95% of all his patients. He has been too ready to throw the responsibility for difficult cases on some one else's shoulders. This has naturally given the public the impression that the family doctor does not know very much. The specialist himself has not helped any by often being remiss in giving the practitioner his due.

Second, there has been no control of specialization in this country. Medical students have become enamoured with the ease with which they may seemingly obtain this standard. A few months or a year of study after a general internship and they start out in some specialty, with practically no knowledge of the relationship of disease as a whole, with no actual experience in the continuity of pathologic conditions, without judgment based on years of observation. The meekness with which men with years of clinical experience have stood for this is amazing.

The mere fact that one chooses to limit the kind of work he is doing does not in my judgment entitle him to fees out of proportion to the value of the services rendered. Skill and knowledge of a high-class, technical type is another matter entirely. Let the general practitioner charge properly for the work he can do, and let him not hesitate to come out with the truth.

The same thing obtains in surgery. Most well trained physicians today can do ordinary surgery. They have as much right to do this as most of the men who call themselves surgeons, and who are still doing medical practice. Go through the country districts, see the general practitioner operating in some farm-house with perhaps one assistant, watch him deliver a forceps case on a sagging bed, observe him repair a broken leg or sew up severed tendons with as good results as are obtained in many an up-to-date hospital. Put that same doctor in a hospital, and he immediately gets an inferiority complex. There, he is not qualified to do anything because his technic is not just so, and because there are a lot of white-gowned assistants standing around waiting for an opportunity to laugh at him. I have no patience with all the red tape put in the way of such a man, questions raised whether he should be allowed to do surgery on his own private patients; and then no questions asked when the surgeon in that hospital takes cases of pneumonia, typhoid, infant feeding and what not. It is a "holier than thou" attitude which physicians have a right to resent. No conscientious man will undertake any case which he feels he cannot handle. The responsibility is his.

As you have observed, this is a paper in defense of the general practitioner, a protest raised against his submersion into oblivion. I believe it is tremendously important to the public welfare whether or not he survives as an individual. I personally believe he will.

So far, I have considered the doctor as an individualist. There is the other aspect of his profession which is causing much concern. The prevention of illness and disability, the care of the indigent, are some of the divisions of the social duties of organized medicine. There is a growing demand that these prob-

lems receive attention from the state and national government. A resistance by the medical man to this legitimate movement will be to his detriment. We must coöperate with those who have this at heart. Do not judge from the preceding statements that I am opposed to welfare and philanthropic work. I think it most unfortunate and unwise that so many of these projects are undertaken by enthusiasts without the coöperation and direction of competent medical advisers. We must share much of the blame for this as we have stood aloof too long. There was a time when the public's knowledge of medical affairs was at least 10 years behind; if we are not careful we may soon find that we will be the ones in the rear of progress in social medicine. The ethics of the profession will not be harmed by a broader view of our social duties. The industrial physician, the city physician, the welfare physician, is entitled to as much respect as the individual practitioner. If his work is properly defined it will be of tremendous value not only to the public but to the profession as well. He will relieve the doctor of all legitimate charity work, and thus make more feasible a true economic status for charges. I believe the general self-supporting population can be educated to the proper expenses allowable for illness, and the need of preparing for these expenses, if we would lead public opinion in its medical education. The more we do this, and do not side-step the issue for welfare workers to handle, the less will be the danger of ill-considered state medicine. If some form of health insurance is the solution, the medical profession will be prepared for the leadership.

I am not attempting to give a solution for the economic ills of the community. Economic laws are the same as ever. Supply and demand govern price. The teaching of thrift and living within one's means are the key-notes of credit. Legitimate insurance for sickness is just as feasible as insurance for accident, for life, for fire and other hazards. The savings bank is available for all. If some families will have things beyond their social position, they cannot expect the medical profession to hold the bag. It is not up to us to

finance them, to give them free medical care, nor is it for the state to do so. The state has no more right to do this than to give free food, clothing, and fuel. If the state, through a mistaken idea of democracy or socialism, should attempt it, those who will suffer ultimately will be the recipient. The medical profession will suffer temporarily, and many of us individually, but the experiment if tried will eventually prove that medicine as an individual service to humanity will be indispensable so long as suffering endures.

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### MOSES MAIMONIDES—PHYSICIAN AND PHILOSOPHER\*

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Moses Maimonides was born on March 30 (Nisan 14), 1135, at Cordova, Spain. His genealogy has been traced to Judah, the Prince, the compiler of the Mishnah, and through him to the royal house of David.

Of the boyhood of Moses we know little. Legend has been busy with him and story goes that the child revealed but little of the man. But the contrast thus drawn between the dull, idle lad and the brilliant, industrious man, is unfounded. The father, Maimon, whose first name was Baruch, was a scholar and a man of enlightenment; Talmudist, astronomer and mathematician. Maimon was a disciple of Joseph ibn Migash (1077-1141) who had imbibed the spirit of Alfassi and who had succeeded the latter as the head of the school at Lucena. The poet, Jehuda Halevi, eulogized ibn Migash in lavish terms but the eulogy was well deserved. Maimon profited by his studies under this renowned teacher, composed commentaries on the Talmud, a work on the ritual, and expository notes on the Pentateuch. He influenced his son's mind profoundly, but in one respect father and son differed. The son was not unemotional but he was a philosopher first of all. The father is all enthusiasm, full of

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\* (Read at the Maimonides Medical League of New Jersey, March 17, 1931.)



faith, longing to dwell on the beautiful stories of Hagadah, not afraid of believing in angels, not desirous of making God an abstraction or the apostle of God merely a deep thinker. He was gifted with a genius for allegory, and his images flow like a soothing stream over the reader's heart. His most famous work, "The Letter of Consolation", must have bound up many a wound and filled with fresh courage those who despairingly feared that God had forsaken His world.

His son Moses grew up in this gentle and refined home, but his mind and soul were trained by a father who, amid the tribulations which were soon to follow, was upheld by the same confidence and trust which he sought to impart to others. Maimon's precept and example planted in his son's heart a pure and ineradicable veneration for all the tried and traditional virtues of the Jewish character. The law and the commandments were his delight. Not the less was this so because Maimon at the same time instilled into him a powerful inclination toward science and philosophy. In Maimon's home the stream of life ran broad and deep. What was Jewish, what was human, alike found a resting place in the capacious soul of Maimonides.

The Talmud was his chosen love. The works of Alfassi and ibn Migash were the eyes with which he penetrated into the Rabbinical lore. Equally devoted was the young scholar to the various sciences expounded by ancient Greeks, medieval Arabs and Hebrews of all ages. Mathematics, philology, natural science, medicine, logic and metaphysics were included in the liberal education of the day and all of those were the familiar friends of our hero's early manhood. Through the maze of these varied pursuits, his keen, orderly intellect found a clear and straight path. Knowledge was not with him a more or less confused amalgam of discordant or dissociated elements, it was one and indivisible. And he early learned the lesson most precious to the genuine student, that: "It is possible for a wise man to be taught by a fool." He saw the limitations of astrology, for instance, but he recognized the necessity of mastering its literature.

But not only in the acquisition and ordering of facts, in the awakening and development of his great intellect, did the youthful Moses grow under the hand of his father, Maimon. In this formative period, his character received the bent which marked it throughout life. Faith and reason, simple piety and fearless inquiry, saintly self-abandonment to God and free examination of ethical sanctions and religious dogmas—these, which are commonly opposite, were blended in him into an inseparable unity. He was perfect with his God. He was faithful to the Law of God as revealed in Scripture, and to the divine reason present in the human soul. He was true to the spirit of Judaism when he announced as the fundamental formula of his life the memorable imperative: "Know the God of thy father and serve him." The tradition which binds ages together, father to son, as knowers and servers of the same, changeless, eternal God is expressed in the phrase—"God is thy father". But something more is also conveyed. Knowledge and service; not obedience with blind eyes, not disobedience with penetrating gaze, but open-eyed obedience and service. An earnest sense that he was born to teach this truth to his own age and to posterity seems early to have forced itself upon him. It filled him with strenuous purpose, but it softened while it strengthened him.

Thirteen years after the birth of Maimonides, the Almohades, a Puritan sect of the Moors of Morocco, invaded Andalusia, and Cordova fell into their hands. The magnificent synagogues were destroyed. The Jews of Spain were secure enough under Islamic rule to venture on ambitious architectural schemes. Now, the choicest products of this art fell before the ruthless Puritans. The schools, too, at Seville and Lucena were dismantled. It seemed as though the splendid edifice of Jewish scholarship erected by Samuel the Nagid and Isaac Alfassi was doomed to destruction. The Jews refused to conform to the demands of the Almohades. A few offered lip-allegiance to Mohammed, but most preferred exile to apostasy, even in outward show. Maimon belonged to the sterner group. He cast no stones at the weaker brethren

but himself refused to bow down in the House of Rimmon. With his family, he wandered hither and thither for several years, at first settling in Port Almeria, but forced to retire thence when the Almohades captured the place in 1151. For 8 or 9 years we lose trace of Maimon, but we know that he remained in Spain without a permanent home or a settled position.

The young son of Maimon never, amid all these distractions, swerved from his ideals. In this formative period he laid the foundation of that mastery over the Rabbinical literature which he subsequently possessed to a unique extent. As he could not carry many books with him on his journeys, he was forced to make his memory his library and to rely on his own stores. The Babylonian Talmud was not yet thoroughly interpreted, nor had the admirable commentaries of Rashi found their way from France to Spain. The scholars of the earlier, middle ages, the "Geonim" had, as Maimonides himself writes, "made fitful attempts to explain the Talmud, but none of them wrote a complete commentary, some being prevented by death, others by lack of leisure". Maimonides himself was destined to a similar fate. He designed a commentary on the whole Talmud, but his plan was not fully realized. Still, he made much progress during this unsettled period of his life. Before he was 23 years of age he had finished his notes on many: (1) Massechtoth Sedarim (the orders of books); (2) Moed (festivals); (3) Nashim (laws of marriage, etc.); (4) Nezikin (civil and criminal law) and on the Tractate Chullin (dietary laws).

But the Talmud, though the first and chief object of Maimonides' devotion, was not his only love. Among his earlier works was a short treatise on the Jewish Calendar (Maamar ha-Ibbur), which displayed no originality but was a clear, scientific, systematic survey, written in Hebrew in 1158. At about the same time he wrote a book on Logic (Miloth Higgayon) to which Moses Mendelsohn subsequently added a commentary. The same year saw the initiation of the first of Maimonides' great trilogy. This was the "Commentary on the Mishnah", which was

named Siraj in Arabic, Maor in Hebrew, meaning "light". This work he completed in 1168.

In 1160, Maimonides left Spain and taking with him his daughter and his 2 sons, Moses and David, settled in Tez, Morocco. Here we find many Jews leading a double religious life on account of religious oppression of the Puritan Almohades, and the Letter of Consolation, written previously by Maimon, was presented to meet this danger.

Maimonides was about 25 years old when he wrote in Arabic his famous letter "Maamar Kiddush Hashem" (Essay on the Sanctification of God). It was his first incursion into public life and it placed him at a bound among the foremost authorities of the time. Henceforward, men recognized in him a leader, at once statesman and enthusiast. Through this letter he saved Judaism from absorption into Islam, in Fez, by persuading the Pseudo-Moslems that they had not lost their inheritance in the God of Israel, and this he followed-up by urging them to abandon their duplicity and live openly and wholly with God.

Owing to the effect his essay produced on the Jewish population, especially those who called themselves Pseudo-Moslems, Maimonides was obliged to abandon Fez, and in the darkness of the night the fourth Iyar, April 18, 1165, the family went on board a vessel bound for Palestine. On the third of Sivan he arrived at Acco or Acre. There he met the dayan, Japhet ben Eliahu. He subsequently went to Jerusalem in company with this Japhet and together they visited all sacred sites and prayed at the Wailing Wall. Palestine then was in Christian hands, the second Crusade having just been over. There were but 1000 Jewish families to be found scattered over the entire land. They were poor in goods and in culture, and Maimonides scouted the idea of settling in an environment where the comradeship of culture and learning was absent, so he decided to go to Egypt; which he did forthwith.

Arriving in Alexandria, he was presented to the then illustrious ruler, Saladin, who, possessing very noble qualities as a man and



as a ruler, soon became a bosom friend of Maimonides. The Jews in Egypt then enjoyed almost complete liberty. They were governed by their own Nagid (Prince) who appointed Rabbis and synagogue officials. Spiritually, the condition of the Jews was less satisfactory than materially. There was little genuine devotion to the law; there were few men of light and leading. Karaism was eating deep into the communal organization. The Karaites sought to govern their lives by the Scripture (Kara) only. To the Karaites was due not the foundation, but the development, of a true Hebrew philology. Through his indefatigable work, Maimonides brought back most of the Karaites into Rabbinic Judaism, thus winning a laudable victory which proclaimed his fame as teacher, orator and leader.

Maimonides was deriving his livelihood from the business in precious stones in which his brother David was the more active partner. Nothing in all that Maimonides wrote exceeds in vehemence his denunciation of those who lived by their learning and served the synagogue or the school for gain. He returns to the subject again and again; he would have colleges without revenues and teachers without salaries.

Soon after his arrival in Egypt, the father of Maimonides died. This was not the only sorrow that now visited our hero. Physical suffering threw him on a bed of sickness, heavy losses diminished his fortune, informers appeared against him and brought him to the brink of death. The final blow fell when his brother David perished in the Indian Ocean and with him was lost not only their own capital but also the money placed with the brother by other traders. The loss of his brother affected him sharply and enduringly. He did not recover from the blow for many years and his letter to his friend Japhet, written long after the catastrophe, bears touching witness to the close sympathy that had united the brothers.

After the death of his brother, Maimonides abandoned commerce in favor of medicine as a means of earning his livelihood. His fame as a physician belongs to a later period in his

career. At first he was an unknown man and his practice was not extensive. He gave public lectures on philosophic subjects but neither his medical nor his tutorial pursuits kept him from occupying his mind with the completion of the work which he had begun in Spain in his twenty-third year, and had spasmodically continued by land and sea during the vicissitudes of his troubled life.

The year 1168 witnessed completion of the *Siraj* (Hebrew *Maor*) or *Light*, as the Commentary on the *Mishnah* was named.

Graetz writes that the *Siraj* possesses clearness, method and symmetry; the construction of the Talmud seems to be opposed to an orderly arrangement but Maimonides demonstrated that this absence of system is a superficial defect. The Talmud readily lends itself to codification, if given the qualification which Maimonides preëminently possessed. Sometimes he dissents from the Talmudic explanations of the *Mishnah*, in cases where *Halachah*, or practical law, is affected. Again, we find Maimonides attaching great importance to the Agadic elements in the Rabbinical literature as sources of ethical and philosophic truth.

In 1174, the Yeminite Jews were suffering oppression at the hands of a chief named Shiite Mahdi who, like the Unitarians of Morocco, associated their purer Monotheism with a fanatic hostility toward every other creed than their own, and offered the alternative between Islam and punishment, many Yeminite Jews became Moslems.

One of the best representatives of the Yeminites, Jacob of Fayyum, appealed to Maimonides in this crisis. In response he dispatched his celebrated "Letter to the South" (*Igguth Teman*), also known as the "Gate of Hope" (*Petach Tikvah*). It was written in Arabic but there are 3 distinct Hebrew translations. It was indeed a message of hope. Persecution, he argued, was in one sense a tribute to the presence of God in the camp of Israel. "Nations envy us our possession of the Law, they contend not with us but with God. Persecutions would never cease but Israel cannot be destroyed. Judaism does not found its truth upon its miracles

but upon the historic fact of the revelation at Sinai." The whole moral of the "Letter to the South" lay in the words—"Be Strong".

The Letter to the South was not a masterpiece of reasoning but it won its victory. It was sent to Jacob Alfayyum with the request that it be circulated widely. Soon, Saladin's brother, Turin Shah, took the reins of government at Yemen, and the Jews were at once relieved of their troubles and became again free men.

The fame of Maimonides was soon in every mouth. The Letter to the South was an epistle in reply to a direct communication. Maimonides boasts that he never failed to reply to any letter except when he was too ill to write. This statement chimes in well with the recent discoveries in the Cairo Geniza, for many "Questions" addressed to him have been found with his autographed answer attached.

In 1174, Maimonides became private physician to the Vizir Alfadhel, and in 1177, Maimonides appears to have been recognized as the official head of the Cairo Jews.

"A physician", he says, in his Siraj, "should begin with simple treatment, trying to cure by diet before he administers drugs". By the might of his genius, Maimonides assailed with friendly hands the fastness wherein lay enshrined the whole Jewish lore. His victory is chronicled in the second part of his great trilogy in the Mishnah—Torah (Deuteronomy) or Yad Hachazaka (strong hand). This gigantic work, a complete codification and digest of Biblical and Rabbinical law and religion, occupied him for 10 years, but when he completed it, in November 1180, the magnitude of the performance, with its 14 books and 1000 chapters, bore no relation to the time which he had devoted to it. To anticipate criticism of his exclusion and inclusion, as well as to provide himself with a skeleton outline, he compiled his "Sefer Haimitzvoth" (Book of the Commandments). The list, afterward prefixed by the author to the Mishnah Torah, displays technicality, which is one of the best qualities of Maimonides.

Richard, King of the Franks in Ascalon, heard of the fame of Maimonides and sought

his services as his physician, but Maimonides declined the honor. Maimonides had made vast strides forward in medical proficiency and repute. Alfadhel placed the name of Maimonides on the list of royal physicians, bestowed an annual salary upon him and loaded him with distinctions. Maimonides shows less originality than learning in his medical works; he relied on precedent and was noted for his familiarity with the older authorities. His medical writings, all of which are composed in Arabic, are for the most part summaries or elaborations of Galen. "The medical oracle of the middle ages". Maimonides used experience as well as precedent as his guide; tested his remedies by actual experiment; recognized how deeply physical conditions are affected by psychic causes; and maintained with a strong touch of modernity that the aim of the doctor is to prevent illness rather than to cure it. It was in times of health that the patient might most effectively prepare to meet and conquer the assaults of disease. Ab-del-Latif, the famous Bagdad physician who stayed in Cairo for 10 years, asserted that his visit to Egypt was in part due to his anxiety to see 3 men, among whom was Maimonides. The poet, Alsaïd Ibn Almulk, sang of Maimonides' greatness as a doctor in ecstatic verse:

Galen's art heals only the body  
But Abu-Amram's the body and soul  
He could heal with his wisdom the sickness  
of ignorance  
If the moon would submit to his art  
He would deliver her of her spots at the time  
of full moon  
Complete for her, her periodic defects  
And at the time of her conjunction restore  
her from her waning.

The third and last great achievement of Maimonides is the work called "The Guide of the Perplexed" (Moru Nevichim), a work replete with philosophy and metaphysics.

The end came on Dec. 13, 1204, when Maimonides died in his seventieth year. A general outburst of grief ensued. Public mourning was ordained in many congregations in all parts of the world. For 3 days.



Jews and Moslems held lament in Fostat. Maimonides was buried in Palestine, at Tiberias. In Jerusalem, a general fast was proclaimed. From the scroll of the law was read the passage (Leviticus XXVI) in which are unfolded the penalties resulting from disobedience to the divine precepts, and from the first book of Samuel the narrative of the capture of the ark of the Covenant by the Philistines, concluding with the words—"The glory is departed from Israel, for the ark of God is taken."

Not less of him than of Hillel could it be said that his gentleness, his even temper, his modesty, were as conspicuous as his belief in himself and his mission, his giant-like intellect, his determination to make the truth prevail.

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### CONSTIPATION\*

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"How are your bowels; are they regular?" "Oh, yes, Doctor they are pretty fair." "Are they opened daily?" "Oh, no." "How often are they moved?" "Well, sometimes every 2 or 3 days and sometimes not for a week." The foregoing conversation, which I venture to say has repeatedly taken place between every physician in active practice and many of his patients, is the author's excuse for writing the following pages.

"It is astonishing and, I may say, incomprehensible, but nevertheless it is a dismal fact, that even among intelligent persons, little or no attention is paid to this all important matter of regular and free evacuation from the bowels. I recall to mind one striking case of an exceedingly intelligent lady of 60, who told me that she had never, throughout her long life, given a second thought to her bowels; when she had the inclination to have them moved, she generally, but not always, would seek the water closet; if the desire did not manifest itself, well, no matter,

she did not care; and sometimes, she told me, a week or more would elapse without one single evacuation. This is not an isolated case. I venture to say, without fear of contradiction, that there are more persons in the world who are costive (generally through their own fault or, at least, through want of information on the subject), by a large majority, than are regular."

These are not my words, but they are on the opening pages of a small book on "Constipation, Plainly Treated and Relieved Without the Use of Drugs", written by Joseph F. Edwards, M.D., and published in 1881 by Presley Blakiston. I found this little book in the Library of the College of Physicians in Philadelphia. It is most interesting and, though it was written for both lay and professional circulation 50 years ago, we can all read it with profit, even today.

So tonight we are considering an old familiar story. Old, it is certain. Familiar, too, perhaps to a degree of holding it in contempt. I recently questioned 20 medical students, within a month or so of their receiving medical diplomas, if they had had the subject of constipation presented to them in a formal way. None of them had heard anything about constipation except in an off-hand way in conjunction with other conditions. Is it not possible that spread of the cults and the distressingly frequent appearance in the various popular magazines of articles critical of the medical profession, is due in part to the fact that too much is left unsaid in the medical schools? Perhaps one of the things that should be given more importance in medical schools and in our medical meetings is constipation. In the great Library of the College of Physicians in Philadelphia, there are 59 volumes of varying size on "constipation"; 40 of them published outside of the U. S. A.; most of them in London and the second largest number in Paris; and of 19 published in this country, 5 were published from 1910 to 1920, 6 between 1920 and 1927, and the remainder before 1910.

I recently had a survey made of 5 representative drug stores in Atlantic City, which showed that of the total number of customers

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\*(Read before the Aesculapius Club of Atlantic City, May 1931.)

in those stores over a period of 4 days, 10% bought cathartics.

The public is becoming, or is, toxic minded. Thanks to the Fleischmann Yeast advertising, the picture of the colon is now as well known to the American people as is the picture of the Prince of Wales or that of Babe Ruth. Perhaps you have been impressed by the amount of pseudo-medical advertising that has been appearing in periodicals recently; particularly the advertising aimed at the relief of constipation. Even the radio is doing its bit to protect the American colon. Figures on the Fleischmann Yeast campaign are guarded jealously, but I have obtained what are supposed to be the accurate lineage figures on the 1931 Flaxolyn advertising campaign. The total of 763,981 lines of advertising to be used in this campaign is to be distributed to newspapers in 24 cities; Pittsburgh leads with 139,389 lines; Philadelphia is second with 130,038 lines; and Boston third with 107,378 lines. Considerable of this advertising is in papers that are supposed to censor their advertising matter. Apparently, cathartics are considered harmless. The cults have seized upon this combination of events, and are most impressive to the ordinary layman because of their "interest" in his constipation and because of the "thoroughness" of their treatment. I recently saw a patient who had a drop of blood sent to Chicago and in return received a diet list with many, many articles on it that she could eat or not eat, and some of the foods I had never heard of. I hold no brief for such quackery. But there are those who contend, and perhaps with good cause, that we, supposedly well-trained, honest, medical men, are wont to turn either a deaf or indifferent ear to the wail of the distressed, constipated individual. It is possible that we have been dismissing this complaint too lightly—with the admonition to "eat a laxative diet consisting of lots of green vegetables and plenty of fruit". The layman, disgusted with our indifference, finds plenty of instruction for relief of his condition in the periodicals. After following them for a while, he perhaps drifts to the quack, who, with much gusto and many suggestions, much instrumentation and

plenty of manipulation, promises much and seldom delivers.

The physiologic literature, as well as the literature of a clinical nature, is captivating. Gastro-enterology as a whole is going through a metamorphosis much like that experienced by cardiology 2 decades ago. Many of the old ideas concerning physiology of the gastro-intestinal tract are making way for newer and more exact comprehensions that bid fair to put gastro-enterology on a more exact plane. As yet, there is no absolute agreement on even so important a thing as the innervation of the colon. Some physiologists explain it one way, while others take a divergent view, based on what would appear to be sound investigations and deductions. Alvarez has done yeoman service in the correlation of some of his advanced physiologic ideas with clinical problems, while clinicians, like Jordan, Kantor, Smithies, Brown, Eustermann, Bargain and Paulson, and physiologists, like Cannon, have made interesting and valuable contributions to the subject. There is a veritable maze of information—much of it conflicting—on the subject.

There is no possibility that I might add to or clarify the situation. It is simply my idea to present a limited phase of the matter in order, possibly, to stimulate greater interest. Commonplace medical conditions are seldom written about and are thus apt to be accepted in a matter-of-fact way, and at the same time neglected. The interest of the public and the recent developments from the various laboratories would seem to warrant our more earnest consideration of this subject. It is just possible that we would do well to start treating *patients* and not *diseases*, and bend our efforts to better education of the public. Perhaps, if every constipated individual, or better, every individual who considered himself constipated, had been given a sympathetic, intelligent hearing by the first physician who saw him, we would have fewer gastro-intestinal invalids and hear less of the cults.

It would be folly to try to discuss the entire subject of constipation in the time allotted to me; that is, the subject of constipation as generally accepted. It is a medical problem.



that needs careful analysis and study, just as any other medical problem, and there are many causes of it that one should consider in a careful appraisal. We realize full well that arteriosclerosis, mechanical interference, gall-bladder disease, and achylia gastrica are just a few isolated factors out of the legion of causes. However, in our limited experience, the chief cause of constipation has been inefficiency of the colon itself and it is this functional disturbance that we will consider tonight. Perhaps some of us have been wont to accept a daily, spontaneously, and easily expelled bowel movement, of a certain size, consistency and color, as normal. But, we must also realize that there are certain wide variations from this average, particularly as to frequency, that must be accepted as normal for the individual.

Constipation is certainly a disease for the general practitioner to handle. It does not ordinarily belong to the specialist. And so, in discussing it, we must of necessity consider it in terms of work-a-day practicability so far as methods of examination and treatment go, leaving the rarer and more specialized examinations to others. It is quite possible for each of us, with our ordinary office equipment, to properly study and manage most cases of constipation. The thing we most often lack is the *inclination* to properly investigate the condition.

The inefficient colon, which we are discussing, is inefficient either because it is overactive or underactive, and these conditions arise either from stimulus or lack of stimulus within or without the bowel. Dr. Sara Jordan, of the Lahey Clinic, in Boston, whose writings always merit unusual consideration, has done much to rationalize our thoughts about constipation. Her own and kindred writings have caused abandonment of the old scheme of classifying the constipated into 2 groups, the atonic and the spastic.

The clinical history of the constipated patient must be taken with meticulous care. The date of incidence of the constipation should be ascertained as accurately as possible. Often it is in the days of childhood. The dietary habit should be noted exactly as to time of eating, and the relation of the time of eating,

and of getting up, bathing, exercising, working and so on. The kind and amount of food eaten and the amount of water drunk should be noted.

It is often disturbing to find out how really harmless the patient considers cathartics or laxatives. I have on my desk 2 pads; one is a prescription pad and its twin is labelled "Medical Instructions". More often than not the patient leaves without a prescription, but he always leaves with a list of medical instructions, which list contains the diet, amount of water to take, amount and kind of exercise, hours for retiring, kinds of baths to take, and so on. Many times, I have been surprised to find, on questioning the patient in a couple of weeks, that he has been taking a daily or semiweekly cathartic, quite aside from the instructions I had given. The excuse is, universally, that he had been doing it always and *did* not think a cathartic had anything to do with the treatment—any more than I overlooked telling them to brush their teeth.

Embarrassment due to the particular location of a lavatory in an office may cause a young clerk to deny nature's call. Unrest occasioned by failure to move the bowels on several days, so that it got to be a phobia, with the hourly taking of a cathartic, are samples of what may be elicited on questioning. The cathartic history is always interesting and sometimes enlightening.

Examination of the patient with constipation should be the usual, complete, physical examination. Digital examination of the anus and rectum, and an anoscopic examination, often reveal valuable information. The complete examination may bring out many accompanying findings of what is commonly called vagatonía or sympathiconía. While many beautiful theories have been spun about these 2 systems balancing one another, and that their imbalance produces constipation or diarrhea, there is little physiologic background for such belief. The commonly accepted principle, that ingested food is excreted in 24 hours, is perhaps quite wrong; a nearer estimate would be 48 hours. Alvarez has estimated that the remnants of 3 days' meals are in each bowel movement.

The function of the colon is somewhat

similar to the condenser on the steam locomotive; bacterial action on the cellulose is completed, the water is returned to the blood, certain salts of the heavy minerals are excreted, and the refuse is stored till ready for evacuation. Many gastro-enterologists believe that the motor function of the gastro-intestinal tract is the important thing to study. Someone has pointed out that there are many duplications of chemical actions in the intestines, as a safety factor, but there is only one muscular tube, responsible for transportation of the food and its end-products, from one end of the gastro-intestinal tract to the other. The autonomy of the gastro-intestinal tract stresses the importance that proper defecation really begins with proper deglutition. In other words, the very autonomy of the tract is responsible for the fact that stresses or strains in any section produce dysfunction along the tract. It is like a railroad system, where, if there is trouble between New York and Trenton, the danger signals go up all along the line as far back, perhaps, as Washington. It is nature's defense. Stasis in the colon may be evidenced by nausea. The colon is already overworked and nausea prevents the patient eating more and throwing more work on the floundering colon.

A fluoroscopic examination is often quite important, and this is within the province of a general medical office. The deduction will be of value, however, only after one has had considerable experience in screen work. I feel that since the upright position is the physiologic one it is the only one necessary in the proper fluoroscopic examination of the gastro-intestinal tract. It should also not be expected that a colon, loaded down with a week's or month's accumulations, could yield its standard findings when in addition to its contents a barium meal is put in. So, it would seem advisable to have the colon well cleared out before giving a barium meal, if we are to really study its standard performance. In examining these patients we should also be sure that the patient is not taking a medicine that would interfere with the function of the colon under study. Reexamination with the fluoroscope is also quite necessary.

Frequently, findings that appear to be of serious moment, will disappear between examinations. The administration of small glass beads, and noting the time they appear in the stool, appealed to Alvarez as a better physiologic test of motor function of the gastro-intestinal tract. Some still use the administration of carmine and charcoal. Complete radiographic study, Wassermann examination, nose and throat consultations, and kindred aids may be sought in study of constipation, just as in the study of any other medical problem.

The treatment of constipation begins in childhood, by preventing its occurrence. Prevention should also be continued in adult life by educating the public to avoid fads in diet and the self-prescribed use of cathartics.

The active treatment of the constipated individual really begins with his first visit to the physician. If he is given a sympathetic hearing, a complete examination, and a heart-to-heart talk on the problem, he frequently gains the confidence that spells success. From then on it is a matter of complete coöperation between patient and doctor, to the end of educating the patient and his colon to normal function.

The first step often is to correct the patient's posture. The sway-backed, pot-bellied, or the stoop-shouldered, hollow-bellied, individual may be greatly helped by suggestions as to posture. Dr. Carnett, of Philadelphia, has generously shown me some of his figures, with which my limited series checks, relative to the lift of ptosed organs by proper posture. His average lift of the duodenal cap is  $4\frac{3}{4}$  in., and of the greater curvature of the stomach  $6\frac{3}{4}$  in. I think it unfortunate that less and less significance is being given to ptosis as a provocative factor in constipation. New standards of normal are constantly being suggested and before long it is quite possible that we will be asked to accept the pelvis as the normal domicile for the transverse colon.

Emotion and fatigue are great factors in the production of constipation, by producing changes in the gradients of the colon. It is always wise to have family spats away from the table, as changes in the gastric digestion



are known to occur under unfavorable conditions, and may be accompanied by dysfunction of the entire gastro-intestinal tract.

An important step in the treatment of constipation is to forbid the use of all cathartics. Sometimes this takes considerable persuasion. However, assuring the patient that failure of the bowels to act for several days will not result in a stroke, or death, is often all that is necessary to get his coöperation. His whole mode of living, as revealed by the careful history, must be adjusted toward proper physiologic action. Often he must not only be told what to eat, but what to drink, how and when to exercise, when to bathe, and how to go to the lavatory. Frequently, I appoint an hour or hours in the schedule for him to attempt to move his bowels. I never encourage grunting and straining. Sometimes I have had blocks or a stool built that would bring his knees quite on a level with his chin (the old fashioned Indian squat position). He is then instructed to massage his abdomen with the palm of one hand, pushing the palm of the other hand over the course of the colon. I know this cannot stimulate movements of the colon, but it keeps the patient occupied while taking sufficient time, and perhaps helps the abdominal muscles. Some patients do remarkably well by elevating the foot of the bed 8 to 10 in., and some do well with the application of a proper belt for ptosis. I have not seen particularly good results from use of belladonna, because the physiologic dose often gives distressing symptoms elsewhere before resulting in benefit to the colon. Personally, I think mineral oil and its compounds are not desirable agents because they must coat the food with an indigestible film, but the time of taking may somewhat obviate this objection. Bromural has occasionally given good results in stabilizing the nervous system incident to educating the colon. A morning cool plunge, with a drink of warm water and a brisk outdoor walk or horseback ride before breakfast, is often helpful. I have found the administration of a large amount of water over the 24 hour period (taken in 4 oz. drinks) beneficial in some cases of pathologic drying out of the feces and was surprised to find a statement

in Zoethout's physiology that the amount of water ingested made no difference in consistency of the stool.

A 20 minutes' rest period after meals, and an evening walk followed by a warm tub before retiring, are often beneficial. Certain exercises, unless contraindicated, are desirable. A favorite of mine is a deep inhalation for 4 counts, holding the breath for 4 counts, and exhaling for 4 counts. Patients get so they synchronize this with walking, and a cycle of the exercises is complete with every 12 steps. In time, it becomes a subconscious effort. Bending trunk on hips, twisting trunk on hips, coming to a sitting posture without use of the arms, alternate retraction and relaxation of the abdominal muscles, and bringing the knees to the abdomen while lying on the back, are just some of the exercises that can be done for 15 minutes, more or less, morning and evening.

Generally speaking, I am not inclined to use the roughage diet, having had better fortune with the smooth diet, but no special diet can be used routinely. There is no pattern that fits every constipated person. The diet, in particular, is a personal equation. The price of success is eternal vigilance.

There are certain patients who, on examination, show a marked anal sphincterismus with or without hemorrhoids or fissure. The patient with such condition sometimes receives a most gratifying result from complete and vigorous dilatation of the sphincter under gas anesthesia. Removal of local lesions about the anus is always essential to the proper treatment of constipation. It has always appeared to me that loss of tone in the colon, and the resultant inability to empty itself, might be caused by continual strife with the over-tense sphincter. A pint enema of normal saline may be used as often as daily, without harm, in emptying the lower bowel. This rids the patient of worry and any distressing symptoms that may be caused by failure of the bowels to act.

Certainly, it is a vastly interesting problem, about which much has been recently learned and much remains to be learned, and it merits our earnest attention.

## BACTERIAL HEART FAILURE

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When we speak of heart failure due to bacterial infection, we cannot interpret the title too literally. While bacterial infection is the cause of a heart condition which is nearly always fatal, still the fatality may occur without the heart's showing any signs of failure.

Bacterial infection, in relation to heart disease, affects primarily the endocardium, giving rise to an endocarditis due often to known organisms, and may be either acute, subacute or chronic. The organisms most likely to cause bacterial endocarditis are, *Streptococcus viridans*, *Streptococcus hemolyticus*, *Staphylococcus aureus* and *albus*, the influenza bacillus, pneumococcus, gonococcus, and meningococcus. Endocarditis of rheumatic origin is purposely omitted because the etiology of rheumatic fever has not been definitely decided, and also because the vegetations of the associated endocarditis are bacteria-free—as is also the patient's blood stream.

Acute bacterial endocarditis, also called acute malignant endocarditis or ulcerating endocarditis, is a secondary manifestation of active purulent infection elsewhere. This form of endocarditis is but one part of an acute pyemia in which the heart lesion is secondary to, rather than responsible for, the systemic infection. In most cases of ulcerating endocarditis, there is a primary focus of acute infection, from which there arises a systemic blood invasion, and the ulcerating endocardial lesion is a secondary focus from which, again, tertiary (embolic) foci arise in the tissues. The primary focus may be in the uterus, lung, bones, prostate or skin. The infecting agent is a virulent bacterium; generally the *Staphylococcus aureus*, *Streptococcus pyogenes*, the pneumococcus or the gonococcus. Duration of the disease is from a few days to a few weeks, for the affection is always fatal.

Subacute and chronic bacterial endocarditis are closely related; where one stops and the other begins is purely arbitrary. Some

writers use the term subacute, others the term chronic; the intensity of the disease, its process and duration, being the deciding factors. To simplify the subject, subacute and chronic bacterial endocarditis will be considered under the single word suggested by Libman—subacute—as the accepted name of a disease having more or less the following features.

Onset is most often insidious; general symptoms include loss of strength and tone; sallow complexion with anemia; moderate loss of weight; and fever. The heart gives evidence of endocarditis at some time or other in almost all cases, and in the majority there has been previous valve injury; widespread arterial embolism takes place; in most cases blood cultures are positive, and the isolated bacterium is either a short streptococcus, much less often the influenza bacillus, and rarely a microorganism difficult of identification, but in all cases the microbe is of low pathogenicity. The course of the disease is slow but progressive, and though remissions occur, it is, once established, almost invariably fatal. The total duration of the illness is from 3 months to 2 years, with an average duration of 6 months. The postmortem findings include a vegetative endocarditis on the valves or wall of the heart, with little or no ulceration, and wide-spread embolic infarction without suppuration. As a result of the embolic progress, there is found a form of glomerulonephritis more or less characteristic of the disease.

Subacute bacterial endocarditis occurs more frequently than we suspect. Sir Thomas Horder, from whose paper (*British Medical Journal* No. 3113, Aug. 28, 1920) much of this material was gathered, states that about 1 in 200 patients admitted to the medical wards of a large general hospital suffer from it. Kinsella, in *Cecil's Medicine*, states that in a hospital of 200 beds about 4 cases a year are seen. How frequently it is met in private practice is hard to estimate; depending much upon the facilities of the observer to properly study the case.

Of all cases, 95% are due to a nonhemolytic streptococcus, the *Streptococcus viridans*. It occurs very rarely before the tenth year, and not commonly before the twentieth nor



after the sixtieth year. Young adults between the twentieth and fortieth years are especially affected; distribution between males and females being about equal.

The disease nearly always attacks valves that are already damaged, although the defects may have been too slight to produce symptoms. About  $\frac{1}{2}$  of all cases give a history of rheumatic fever, but between occurrence of the rheumatic infection and onset of the endocardial infection there has usually been an interval of several years, very often years of good general health.

The invading organism comes from some focus of infection, where we often cannot tell, but wherever its site, teeth, tonsils, sinuses, gall-bladder or appendix, the process is usually one that has caused little or no local disturbance.

Onset is usually insidious, the patient complaining of increasing lassitude, anorexia, vague pains, chilly sensations, feverishness and, less often, of cardiac disturbances. Fever is, as a rule, slight at first and moderately high and irregularly remittent or intermittent in the later stages. Periods of apyrexia may occur. Symptoms of cardiac involvement, such as palpitation, precordial discomfort, dyspnea and cough, in many cases are not pronounced, at least not until late in the disease. Auscultation reveals a murmur, most frequently in the mitral or aortic area. Petechias appear in the skin, conjunctival or buccal mucous membranes. Osler's nodes, (painful erythematous nodules, appearing usually on the hands and feet and lasting 1-2 days) occur sometime during the disease; Osler having regarded these as pathognomonic of this disease. Embolism in the brain, lungs, spleen, kidneys, and intestines occur not rarely. There is progressive loss of flesh, and anemia. The latter being often profound in spite of the fact that the disease is due to a nonhemolytic organism.

Blood culture is always positive sometime during the course of the disease. The spleen is nearly always palpable. An enlarged spleen with a low grade fever, not otherwise accountable for, should always make one think

of subacute bacterial endocarditis. The skin may be yellowish white or, later, brownish in color. It is common to find a small amount of albumin, a few casts and traces of blood in the urine, the result of the accompanying embolic glomerulonephritis.

To make a diagnosis of bacterial endocarditis, certain criteria are necessary: (1) Evidence of cardiac valvular disease; (2) signs of sepsis; (3) positive blood culture; (4) embolic phenomena.

What of the prognosis? This formerly was dispensed with by saying "all cases are fatal". If, however, we refer to Libman's article in the *American Heart Journal* (Vol. 1, No. 1, October 1925), we find much to change this version. He studied over 800 cases, extending over a period of 25 years. In that form of the disease which has usually been recognized, running a course of 4 to 18 months, and characterized by fairly marked elevations of temperature, positive blood culture and embolic phenomena, very few recoveries have been reported. Libman, however, in his first 150 cases of this type reported 4 complete recoveries, or 3%. Altogether, he has records of at least 10 complete recoveries.

Of the fatal cases, the cause of death is most commonly exhaustion. The myocardial weakness which may be present is usually of the type due to fever, anemia and general weakness. At times, particularly if mitral stenosis be present, death may occur suddenly, preceded or not by hemoptysis (usually due to pulmonary infarction), or by a sharp attack of pulmonary edema. Embolism of a coronary artery is a rare terminal event; of a cerebral vessel, a quite frequent one. The patient may be carried off by gangrene due to embolism of a peripheral vessel. Other important causes of death are:—polynuclear meningitis; subarachnoid and intraventricular hemorrhages, which are due to rupture of embolic aneurysms; rupture of such aneurysms situated elsewhere in the body; hyperpyrexia; and uremia. A complicating pneumonia or an intercurrent or preëxisting disease may terminate life.

## RELATION OF ARTERIOSCLEROSIS TO CARDIAC PATHOLOGY\*

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There is no pathologic condition that interests the cardiologist to a greater extent than arteriosclerosis. Next to rheumatic fever, arteriosclerosis plays the greatest rôle as an underlying factor in the production of cardiac pathology. When we consider the fact, that the heart is only one of a trilogy that is extremely susceptible to sclerosis, namely, heart, vessels and kidney, then we realize of what importance a thorough study and evaluation of this condition is in the proper understanding of numerous cardiac complications.

Much has been written on arteriosclerosis, yet the subject is far from being exhausted. Many theories concerning this condition are still debatable and the final word has not yet been spoken. It is almost universally accepted that chronic hypertension results in arteriosclerosis, yet there are some who do not share that opinion. This latter school admits that long continued hypertension will produce thickening of the vessel but not arteriosclerosis. The difference between thickened and arteriosclerotic vessels is about the same as between cardiac hypertrophy and myocardial degeneration.

To consider a blood vessel as arteriosclerotic, one must find in it not only muscular or fibrous hypertrophy but also evidence of degeneration such as atheromatous deposits and, later, even calcification. All of us begin to deposit an additional amount of connective tissue in the media and even somewhat in the intima after the third or fourth decades of life. Some less fortunate show evidence of fatty degeneration and the deposition of a special fatty substance, cholesterol, in the arteries at quite an early age. These fatty

substances have the power to attract and deposit calcium. It is the presence or absence of these fatty or calcareous changes in the vessels of the various parts of the body, and particularly in the intrinsic cardiac vessels, the coronaries, that determines whether or not a given individual will ultimately develop an arteriosclerotic heart.

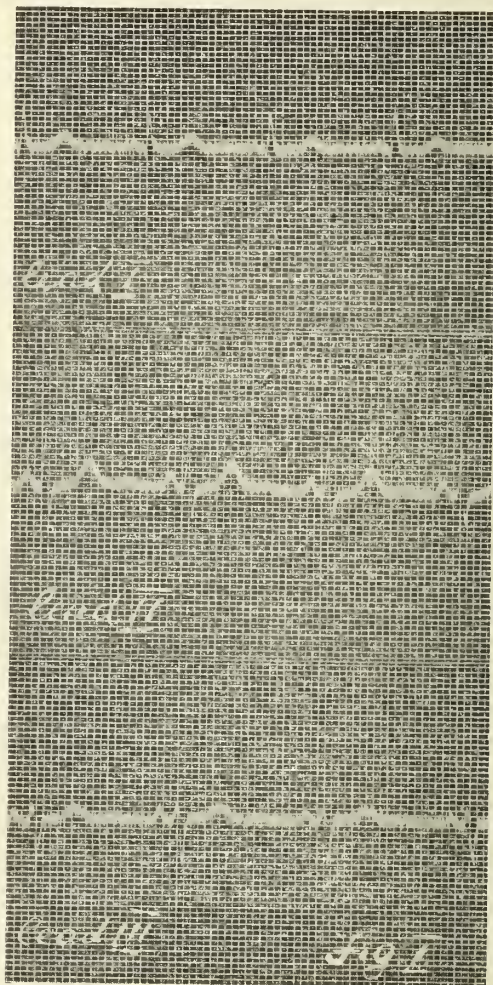


Fig. 1. Typical case of left ventricular preponderance without evidence of myocardial degeneration. Q.R.S. 0.08 sec. T is upright in all leads; no notching.

One must differentiate between a heart in arteriosclerosis and an arteriosclerotic heart. In the former, one may find only cardiac hypertrophy or dilation or both; in the latter one finds myocardial degeneration. It is an established fact that arteriosclerotic changes need not be generalized, and are frequently confined to one region, and may even be limited

\*(Read by invitation before the Medical Section of Academy of Medicine of Northern New Jersey on March 10, 1931.)



to one artery. Thus, we may find an endarteritis obliterans in one vessel, with perfectly normal vessels in the rest of the organism; and, that the coronaries may be the site of sclerosis without any other artery being involved, is common knowledge.

We must also divide the truly sclerotic

*Group 2*, in which, as the result of a sudden occlusion of a larger or smaller part of a coronary tree, a wedge shaped infarct develops which, if the condition does not terminate fatally, undergoes gradual replacement by fibrous tissue producing a large scar in the occluded part of the myocardium.

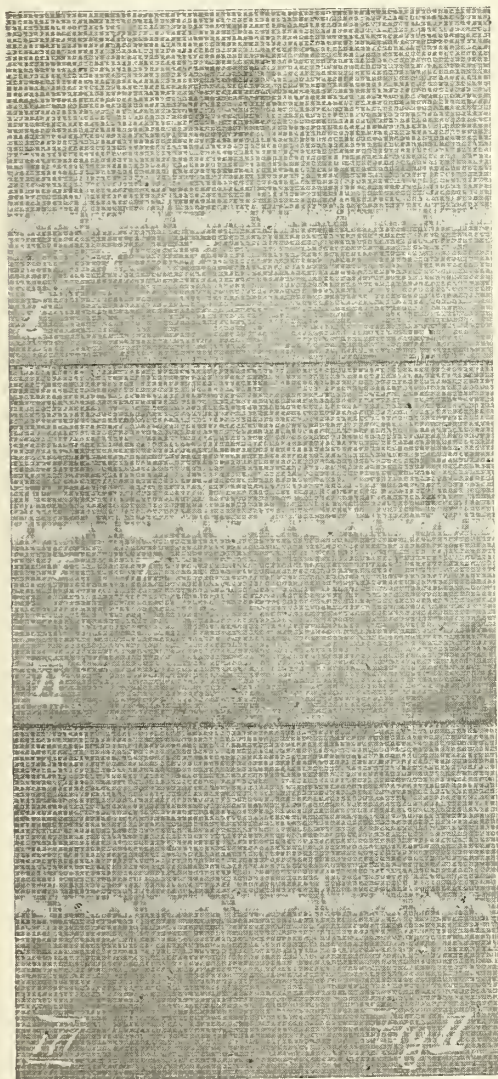


Fig. 2. Case of left ventricular preponderance with signs of myocardial degeneration. T is inverted in leads 1 and 2. Q.R.S. somewhat widened beyond the normal of 0.08 sec., and slightly notched.

hearts into 2 groups: *Group 1*, in which the myocardium has been gradually undergoing widely disseminated, degenerative changes because of the inadequate blood supply afforded by the gradually sclerosing coronaries and their capillaries.

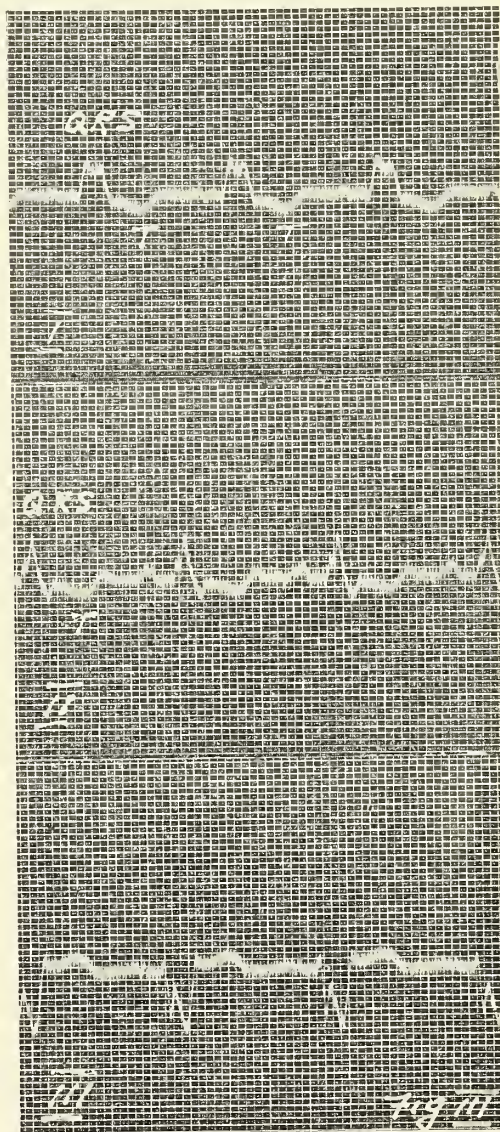


Fig. 3. Case of extreme myocardial degeneration in a diabetic. T is inverted in leads 1 and 2. Q.R.S. widened to 0.16 sec., instead of the normal 0.08 sec. and extremely notched. The degenerative process here affected also the conducting system, producing right bundle branch block.

We have 3 types:

(1) The heart in arteriosclerosis, with hypertrophy and dilation due to arteriosclerosis in some other part of the body. The



electrocardiogram in these cases usually shows a curve of the left ventricular preponderance. The Q. R. S. wave usually not widened beyond the normal 0.08 second T is upright in the first and second leads. (Fig. 1.)

(2) The true, disseminated, fibrotic heart due to generalized capillary and arteriolar sclerosis of the coronary tree. The electro-

beyond the normal 0.08 second and may be notched. (Figs. 2 and 3.)

(3) Localized sclerosis, or scarred heart, following coronary thrombosis. The latter is frequently accompanied by focal pericarditis or the episthenocardia of the German school. Furthermore, the scarry part of the myocardium, which is usually located in the anterior wall of the left ventricle, frequently, under the stress of intracardiac pressure, bulges out

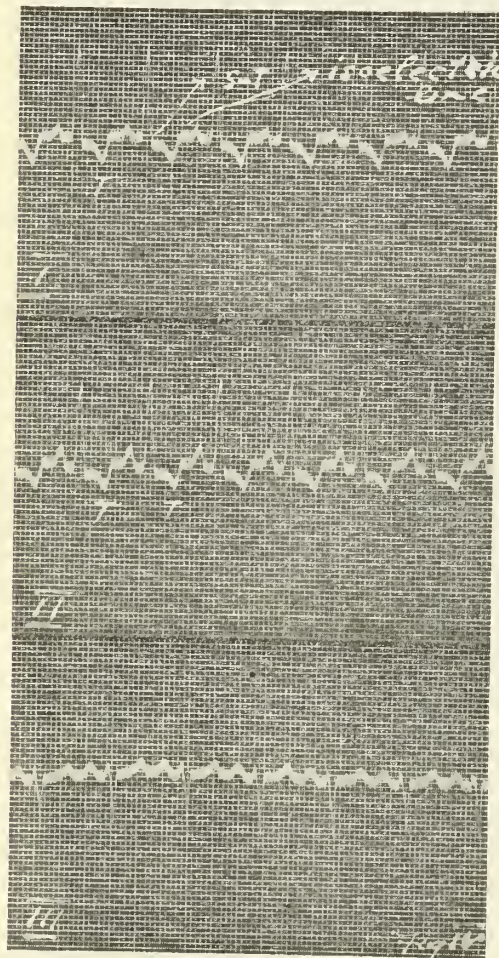


Fig. 4. Myocardial degeneration in the case of a patient suffering from angina pectoris. T is inverted in leads 1 and 2. S-T line is below the iso-electric base line. This is typical of cases with coronary changes.

cardiogram in these cases usually shows, in addition to the left ventricular preponderance, some additional deviation from the normal. The T wave is often inverted in the first or second leads. If the lesion is severe, the T wave is usually inverted in both. In very severe cases, the Q. R. S. wave is widened

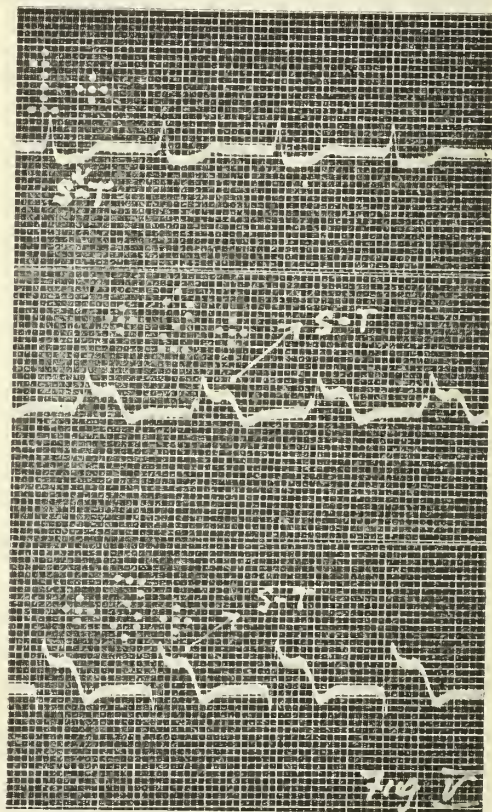


Fig. 5. Case of coronary thrombosis. Electrocardiogram taken 2 days after attack. S-T line in the first lead definitely below the level of the iso-electric base line. In the second and third leads S-T line is away above the iso-electric line and fuses with the T curve. The tracing, in addition to other features, presents a typical picture of severe coronary disease.

to form a ventricular aneurysm. Cases of rupture of such aneurysmal dilatations have been reported. The electrocardiogram in these cases is characteristic. The S-T line is either above or below the base line. It frequently is above in one lead and below the base line in another, and assumes the typical, easily recognizable,



coronary curve. If the myocardial lesion is severe, the T wave is inverted in one or more leads. (Figs. 4 and 5.)

As regards the generalized sclerotic heart, the one spoken of by European writers as myodegenerative cordis, or in plain English myocardial degeneration, I feel that we are guilty of many erroneous conceptions and ideas. We frequently hear even cardiologists of note use the term hypertensive or congestive heart. Nothing is further from the truth than such a conception. The hypertensive or arteriosclerotic heart rarely, if ever, produces a congestive syndrome. Under congestive heart failure we understand hydrothorax, swollen liver, edema of the lower extremities and, finally, general anasarca. This, outside of some pulmonary congestion, rarely occurs in the hypertensive heart. The signs or symptoms of generalized congestion, or stasis, are the ear marks of a mitral heart or of any other case of right heart failure. To be sure, all hypertensive heart patients are unusually free from congestive signs. Their legs are thin and the abdomen is frequently scaphoid in shape. The face is usually not cyanosed but, on the contrary, is pale and ashy gray. Consistent with this observation, one is not to look for any evidence of congestion, such as swollen legs or liver, as an early sign of decompensation in these hypertensive arteriosclerotic, erroneously called, congestive hearts. Nor do these patients, at least in the early stage, complain of dyspnea on effort during the day, as do patients with right sided failure such as occurs typically in mitral disease.

The earliest signs of decompensation in the arteriosclerotic heart are nocturnal dyspnea and night sweats. Somewhat later, one can notice Cheyne-Stokes' respiration not only when the patient is asleep but even while he is awake but ordered to close his eyes and relax. Insomnia is one of the earliest signs of decompensation in these cases. They are also susceptible to cardiac asthma and *acute* underscoring acute, pulmonary edema, in contradistinction to the slowly developing pulmonary edema of slowly progressive stasis observed in mitral disease. These patients fre-

quently die before any secondary right-sided difficulty develops and, therefore, before congestive symptoms become manifest. Some die of uremia, others of cerebral accidents, and the vast majority of cardiorenal collapse before purely back pressure congestive symptoms have set in. A comparatively small proportion of the patients live long enough to have the right heart secondarily involved, with resulting typical congestive symptoms.

Recently, the question of aortic stenosis due to localized arteriosclerosis and calcification of the aortic valves is receiving the serious attention of cardiologists. So far, it has not been established whether this calcification is a superimposition on an anlage of a previous rheumatic valvular disease, or is the logical evolution of a peculiarly localized aortic valve arteriosclerosis; the evidence on hand seems to favor the latter.

We cannot stress too much this peculiar mode of onset or early signs of myocardial failure which is generally left-sided, nor can we over-emphasize the fact that congestive heart failure is not usually the final outcome of either hypertensive, anginal or arteriosclerotic hearts. And, finally, that the heart in arteriosclerosis need not necessarily be an arteriosclerotic heart.

#### AS TO TREATMENT

There is no other medical condition where a thorough and exhaustive knowledge, not only of the pathology and disturbed physiology underlying these conditions in general, but a thorough scrutiny and appraisal of the amount of pathology in a given case, is so essential. Also, an estimation of the patient as a whole, his peculiarities, his reactions, his psyche, his environment, is paramount. Digitalis does not accomplish much in these cases. Attention to diet, graded amount of effort, exhaustive study and attention to kidney function, particularly its concentrating power, and a corresponding allowance of fluids and, above all, individualization of patients, will frequently bring results in cases that look almost hopeless.

## THE FEMALE SEX HORMONE\*

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Work with the female sex hormone dates back to 1906, when Dr. Robert T. Frank and his associates initiated this important phase of endocrine studies in Denver, Colorado. It was interrupted for several years during the World War and later continued uninterruptedly till the present date, first in Denver and later in Dr. Frank's research laboratories at the Mount Sinai Hospital, New York City. It was in these laboratories that I first became interested in Dr. Frank's work, some 4 years ago, and ever since then I have followed the work of Drs. Frank and Goldberger with the keenest interest.

Some 6 or 7 months ago, I was encouraged to duplicate Dr. Frank's work in connection with our Gynecologic and Sterility Clinic. I am obliged to do the work on a very small scale, due to lack of facilities, but the interest and undoubted value of this work is proving a sufficient incentive to continue.

The term "female sex hormone" was given by Dr. Frank to the active substance found in the ovarian follicular fluid corpus luteum and the placenta. It is also found in the amniotic fluid, blood and urine of mature and pregnant animals and humans, and may be detected in minute quantities in certain plants and yeast. The pure isolated hormone is a crystalline substance, chemically a complex alcohol, consisting of carbon and hydrogen; does not contain nitrogen and is, therefore, not protein in nature.

Female sex hormone produces a periodic sex cycle, called *estrus* in lower animals, and a menstrual cycle in human beings. The periodic sex cycle in animals is evidenced by hyperplasia and edema of the uterus and vagina, increased secretion, cornification, and finally desquamation, of the lining epithelium.

The phenomena of maturation can be produced at will by injecting appropriate amounts

of the female sex hormone into immature and castrated animals, and the induced maturity will continue without further injections. Hormone will also produce pregravid changes in immature and castrated animals as is evidenced by enlargement of the uterus and breasts.

In humans, this hormone appears in the blood stream periodically 10-15 days prior to the onset of menses; increases in amount and reaches its greatest concentration 5 to 2 days prior to the onset of menses, and disappears from the circulation 1 day before menstruation, but is found in great concentration in the endometrium, and in the first 5-10 c.c. of menstrual blood. Also, in many cases of functional menorrhagia and metrorrhagia it has been found to persist longer in the circulating blood and in the menstrual flow. These phenomena have been noticed particularly in menorrhagia of puberty, and pre-climacteric changes presumably due to the persistence of unruptured graafian follicles which continue to secrete the hormone. However, not all functional menorrhagias and metrorrhagias are due to over-secretion of the specific hormone; sometimes these conditions are due to under-secretion.

There are many other conditions in which it is important to estimate the presence and the amount of female sex hormone.

(1) In menorrhagias and metrorrhagias, as previously mentioned, therapy will depend on knowledge of whether these conditions are due to over or under-secretion.

(2) In amenorrhea and oligomenorrhea, periodic appearance of the female sex hormones in the circulating blood is frequently demonstrated, though it is sometimes totally absent. There are, however, cases of amenorrhea where an excessive amount of this hormone is demonstrated periodically; presumably due to persistence of the corpus luteum, in the following manner:

After ovulation, the graafian follicle undergoes rapid vascularization, and formation of luteal cells takes place, which cells begin to produce a secretion of their own that is rapidly taken up by the blood stream through the rich capillary net work penetrating the corpus

\*(Read at the monthly meeting of the Clinical Society of Newark Beth Israel Hospital, April 8, 1931.)



luteum from the ovary, and at that stage the corpus luteum appears *red* and is called *corpus vascularis*, but it later becomes pink and as the retrogressive changes take place, pinkish-yellow, and finally yellow.

It is only with the onset of retrogressive changes that connection with the circulation is cut off and the corpus luteum functions for a short while as a gland of internal secretion; its luteal cells secreting, according to some authorities, 4 hormones, among which the female sex hormone has been clearly demonstrated.

In humans and the higher type of monkeys, the corpus luteum is indispensable to establishment of menstruation; while the follicular hormone causes the hypertrophy, vascularization and branching off of the endometrial glands, it is the corpus luteum which accomplishes the final preparatory changes in the endometrium for possible embedding of the fertilized ovum. Dr. Emil Novak calls these final changes produced by the luteal secretion the "topping off of the endometrium". When the ovum is not fertilized, or fails to be embedded, the corpus luteum undergoes retrogressive changes, thus precipitating menstruation; the persistence of corpus luteum, as mentioned above, holds the phenomena of menstruation in abeyance, through its other hormones.

(3) In determination of sex in malformed or pseudo-hermaphroditic persons, demonstration of the presence or absence of the female sex hormone is most important. I am at present taking weekly specimens of blood from such an individual, hoping to detect the presence of a cycle.

(4) The investigations of Corner and Hartman have shown that in certain species of monkeys menstruation occurs regularly without ovulation during the summer months, that is, the non-breeding period; these observations were made repeatedly by surgical procedures and no maturation of graafian follicles or formation of corpora lutea was demonstrated. The explanation advanced is, that the ovarian stroma secretes a female sex hormone at those periods, or, as Dr. Emil Novak suggests, the anterior pituitary takes on a vicarious activity, when the ovary is inert, as

it becomes definitely hypertrophic during pregnancy and in castrated animals.

(5) In sterile women the relationship between the amount of the female sex hormone in the blood and in the urine is decidedly disturbed: a diminished amount of the hormone in the blood with a corresponding increase in the urine has been definitely demonstrated by Dr. Frank and his co-workers. This phenomenon could be explained only by assuming that there is a peculiarly low renal threshold for the hormone in these individuals, thus depleting the circulation of the female sex hormone and impairing fertility. Occasionally no hormone could be found in the blood of sterile women with either normal or abnormal menstrual rhythm.

*Technic for estimating female sex hormone in the blood:* (1) In menstruating women, 40 c.c. blood should be abstracted from 5-2 days prior to the period; in non-menstruating women, weekly specimens must be taken for 4-5 weeks in succession, in order not to miss the cycle. (2) The blood is mixed with 30 gm. anhydrous sodium sulphate till a dry paste results. (3) The paste is pulverized finely in a mortar. (4) It is extracted by shaking in a flask with 100 c.c. ether for 10 minutes; allowed to settle 10 minutes; ether is poured off into an evaporating dish; the residue is again shaken with 75 c.c. ether for 10 minutes; again settled for 10 minutes, and the second ether extract is added to the first and left to evaporate over-night. After evaporation a film of yellowish residue remains, and this is emulsified with 2 c.c. distilled water and injected into a mature, castrated mouse in divided doses over a period of 48 hours.

Vaginal smears are then taken twice daily and appearance of estrus is indicated by the character of cells discovered: (1) Leukocytes and mucous, negative. (2) Leukocytes and small round nucleated cells, negative. (3) Round nucleated cells—no leukocytes—weakly positive. (4) Squamous epithelial cells, nucleated and nonnucleated, strongly positive. When a mouse shows a positive reaction, smears should be taken daily for 8-9 days longer, to make certain that there has not been any regeneration of ovarian tissue.

The urine testing technic is not described here, because it is at present being radically modified by Frank and Goldberger and is not ready for publication.

Testing for the female sex hormone is being done at present in our Gynecologic Clinic with a variety of individuals, and reports upon a number of interesting cases will be presented in the near future.

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## PRACTICAL GASTRO-ENTEROLOGY\*

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A careful history is still one of our most valuable aids in diagnosis, and with such record a provisional diagnosis can usually be made and then confirmed or modified by other methods of examination. Pathology in the viscera can manifest itself in symptoms which are truly bizarre, and nowhere more so than as manifested in gastro-intestinal tract disease.

It is always important, in taking the history and examining the patient, to distinguish between organic and functional diseases of the stomach, because there are 2 distinct classes of patients with gastric symptoms. One class has real disease, such as cancer, ulcer or gall-bladder inflammation; and the other has secondary or reflex digestive disturbances due to disease elsewhere in the body. It is well to remember that functional gastric disease occurs in about 90% of the patients who consult us for gastro-intestinal distress.

Inspection, palpation and percussion of the abdomen are easy and often secure valuable information. While x-rays may help in procuring evidence necessary to make a diagnosis, it is a mistake to rely upon them too much. Often a test meal or a stool examination will give more help than the radiograph; as in a patient with diarrhea, where a test meal showing achylia gastrica will give the diagnosis. However, let me add that a careful history, a general physical examination, func-

tional tests of stomach and bowel, and lastly the x-ray evidence, give the most accurate diagnosis and the surest basis for treatment.

It is important in history taking not to overlook the important psychic and emotional causes of indigestion, particularly in women. On the other hand, mistakes occur when nervous symptoms such as headache, insomnia and excitability are so obvious that one rashly concludes the trouble is "just nerves" and nothing else; for it often happens that functional disorders, through the years, produce organic changes.

To evaluate the patient's complaints, I usually divide them into major and minor symptoms.

*Minor symptoms:* (1) Epigastric distress after meals; (2) constipation; (3) belching gas or fluid; (4) heart burn; (5) nausea; (6) globus hystericus; (7) transient diarrhea; (8) transient anorexia.

*Major symptoms:* (1) Pain; (2) vomiting; (3) loss of weight; (4) persistent anorexia; (5) persistent diarrhea; (6) bleeding from bowel or stomach; (7) obstipation.

Another aid in evaluating complaints is to note whether the patient is of the sthenic or asthenic habitus. The former with thick neck, narrow hips, wide costal arch; and the latter with long neck, narrow chest, wide hips, long body and narrow costal arch. The asthenics are usually slender in build and weak in structure; have functional disorders and complain of the minor group of symptoms. They tire easily and are malnourished and constipated, because of relaxation of the general musculature. They usually suffer with the type of ptosis which causes symptoms, and they are constitutionally inferior. Do not misunderstand me to mean that this group cannot have organic disease; it can, on the general principle of *minoris resistentia*, but for a long time the functional disorders predominate.

I wish next to bring to your attention a physical sign which the gastro-enterologist finds of great help in evaluation of subjective pain; the so-called "styloid tenderness", which Dr. Libman, of New York, has popularized. We know that individuals vary in their ability to bear pain. This test of differentiation is

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\* (Read before the Clinical Society of the Elizabeth General Hospital and Dispensary, Nov. 18, 1930.)



performed by first pressing on the tip of the mastoid and then on the styloid process at the angle of the jaw. Patients react to this test in 2 ways: the pain-sensitive will wince and jerk the head back when the styloid bone is pressed upon; while the pain-insensitive will make no faces no matter how hard you press. The normal person will react by feeling the pressure cause moderate pain. This is a most valuable sign, and a test purely for pain, which does not depend on sex, race, habits or state of health. Individuals complaining of abdominal pain, who show a markedly hyper-sensitive reaction, are very often functional cases. Patients who are hyposensitive to this test and who have abdominal pain are usually found to have organic disease. Those patients with perforated stomach ulcers who give no previous history of gastric disturbance belong to the latter class.

The diagnosis of gastro-intestinal disorders has become more accurate since the introduction of x-rays as a diagnostic adjunct. The fluoroscopic calls for a few suggestions about when to use it:

(1) In all patients in whom serious disease, such as ulcer or cancer is suspected, the case history frequently throws no light to differentiate gastric from duodenal ulcer.

(2) In all patients within the cancer age who previously were well and then developed gastro-intestinal symptoms such as persistent anorexia, or loss of weight in the absence of diabetes.

(3) In most patients with digestive trouble of long standing, where systemic causes have been excluded.

(4) In patients with severe anemia and some loss of weight.

(5) In sudden onset of constipation or blood in the stool, to rule out cancer of the bowel.

(6) To aid exploratory laparotomy so far as possible, as in suspected intestinal obstruction where a plain plate will often give information of value; also in suspected perforated stomach ulcer where air at the dome of the diaphragm will aid in the diagnosis.

The following case histories are taken from the stomach clinic of this hospital, to illustrate what has been said and other points to be brought out as we proceed. We have ruled

out systemic disease in patients where these are not mentioned, and have utilized the service of all special clinics whenever necessary to rule out reflex causes of symptoms.

#### CASE HISTORIES

*Case No. 1.* Mrs. W., aged 39, seen in the clinic April 12, 1929, stated that since the birth of the last child, 3 years ago, she has had dyspepsia. For the past 4 months the symptoms have been aggravated by epigastric pain which occasionally shifted between the shoulder blades and sometimes would wake her at night. She belches gas excessively, after meals; has no appetite; is very constipated, and has fallen from her usual weight of 176 lb. to the present weight of 145 lb. Her habits and marital history were negative. Libman test, hypersensitive.

Physical examination revealed a fairly well nourished woman who probably was previously over-weight, of the sthenic habitus, tender in the epigastrium as well as along the ascending and descending colon. The liver was not palpable, nor was there gall-bladder tenderness. Test meal revealed no free HCl. All her symptoms being of the major group, an x-ray picture was taken of the gall-bladder and revealed adhesions and shadows suggesting stones.

At operation a diseased gall-bladder containing stones was removed. She did well for 6 months and then returned with almost identical symptoms and a gain of 25 lb. in weight. After the operation, with care in diet and bowel management, she had felt well, but then, because of slight distress after meals, she returned to her old habits of eating and the taking of cathartics, and brought back her symptoms. The point I wish to bring out is that many gall-bladder operations, however necessary, will be followed by a return of functional gastric disturbance unless properly managed as to diet and bowel care, and the prevention of adiposity. The sequence of pregnancy and dyspepsia, by the way, is typical of many women with gall-bladder pathology.

I have in mind another clinic patient, 5 ft. in height, weight 232 lb., with definite gall-bladder history, who was so relieved of symp-

toms, as a result of losing 70 lb. weight, that she refused surgery.

*Case No. 2.* E. Smith, colored male, aged 20, complained of pain in the left upper abdominal quadrant, radiating to the right inguinal region for 5 days. The pain would come after eating and be cramp-like in nature; associated with it was nausea and belching of sour fluid. Had gonorrhea 8 years previously. Examination revealed painful, swollen left testicle.

Reflex gastric disturbance, due to epididymitis, explained the symptoms.

*Case No. 3.* Mr. C., aged 29, white, came to the clinic complaining of burning in the epigastrium, and pain under both shoulder blades. He had varying degrees of gastric disturbance for the past 7 years. No epigastric pain, but the burning comes 2-3 hr. after meals—every day for the past 2 weeks—and even wakes him up at night. It lasts  $\frac{3}{4}$  to 1 hour, or until relieved by baking soda or food. He has had 3 such attacks in the past  $1\frac{1}{2}$  years. Between attacks he does not suffer. Appetite good, but is afraid to eat. Has used drugs to move his bowels for years. Drinks 4 to 6 cups of coffee a day, smokes 20 cigarettes and takes alcoholics in moderation. Denies venereal disease. Libman test, hypersensitive.

Physical examination revealed an asthenic type of individual with diffuse, epigastric tenderness, and a tender, spastic, descending colon. No gall-bladder tenderness, and rectal examination negative.

Treatment directed to habits, diet, and bowels relieved him in 1 week.

While we have no x-ray report on this patient (usually they do not return, if relieved), the typical ulcer history—of gastric distress with remissions and exacerbations, and food relief—leave little doubt that he suffered from a stomach ulcer.

Another point is that here is an asthenic individual who for years had functional gastric disorder due to bad habits and constipation, and who has now developed an organic lesion. You may have typical ulcer symptoms without the presence of an ulcer, but due to pylorospasm from causes such as excessive cigarette smoking and coffee drinking, chronic

gall-bladder disease, chronic recurrent appendicitis, or post-operative adhesions.

*Case No. 4.* Clinic patient, A. C., aged 30, complained of stomach distress for the past 2 years, lately much aggravated. It comes as a dull, burning, heavy distress in the epigastrium, and is not entirely relieved by food and soda. Eructation of sour material and gas, gives relief.

Physical examination showed a small round protrusion just above the umbilicus and painful on palpation; a ventral hernia.

Here we have an asthenic individual with ptosis of the abdominal organs associated with simple colitis of the irritative type, and no teeth. Because of the latter condition she could not eat solid food, but subsisted chiefly on coffee and cake, and so she had very little stool. With loss of weight (from 130 to 119 lb.) the abdominal wall became atonic; and with the natural tendency, ptosis developed. The atonicity of the bowel led to constipation and the soap suds enemas to spastic colitis, to complete the mischief, and give her reflex gastric symptoms.

This woman was relieved by taking solid food in small particles; sedative drugs for the over-stimulated vagus nerve; and oil by mouth. She was relieved and gained weight.

*Case No. 5.* Mrs. S. M., complained that for the past 3 months she had epigastric distress after meals, belching of gas, frequent heart-burn and nausea, poor appetite. She feels numb and hot all over; is very nervous; has been taking daily enemas of soap suds in order to move her bowels, and lately noted "white phlegm" and streaks of blood in her stools.

The chief points of interest in her physical examination were absence of all teeth, asthenic build, protuberant lower abdomen, marked dynamic aorta. Rectal examination showed a relaxed, boggy rectum and atonic sphincter. Libman test, hypersensitive.

The x-rays revealed a markedly atonic stomach pushing the transverse colon down into the pelvis. The descending colon was redundant and spastic.

*Case No. 6.* G. L., aged 68, male, came to the clinic complaining of epigastric pain re-



lieved by food but recurring daily after each meal. Condition existing for the past 4 months, with only temporary relief for a few days at a time. Three such attacks in the past 33 years, and about 10 years apart. Since onset of the present attack, his appetite has been failing progressively until now he has absolutely no desire for food. Vomits occasionally mucus or food, and is extremely costive. He has dropped from usual weight of 165 lb. to the present weight of 148 lb., during these 4 months.

Examination reveals a pale old man of the hypersthenic habitus (the large framed, big chested type) with scaphoid abdomen. Tender all over the abdomen, but especially over the colons and "cap" area of the stomach. Muscular rigidity noted over the entire epigastrium, and no mass could be felt. He had a moderate sized left inguinal hernia. Rectum free from tumor mass. Libman test, hyp-sensitive. The test meal showed free HCl 20, and no blood.

X-ray diagnosis: Scirrhus carcinoma of pyloric portion of the stomach; confirmed by operation.

Here we have a man with typical ulcer history, over a period of years, and finally cancer. Possibly the history as given appears simple in making this diagnosis. My provisional diagnosis was duodenal ulcer or malignancy. I have seen men of this type, with the same history, produce an ulcer at operation.

It is well to keep in mind that cancers and ulcers occur in about 1/10 of the patients with "stomach trouble". The great majority of dyspeptics have trouble of reflex origin—from curvature of the spine to eye disturbances—and it is not sufficient to classify them as "sour stomach", or catarrh, or neurosis. Look for the cause, always keeping a mind's eye on the systemic causes—heart, lung or kidneys.

I would also stress the point that an early sign of gall-bladder disease is gaseous indigestion, sometimes associated with loss of weight and constipation. Remember also that most stomach ulcers are diagnosed 10 years too late; that is, most surgical ulcers give a history of 10 or more years' duration before they arrived at operation. Any chronic gastric

disturbance, no matter how atypical the symptoms, associated with periodicity of recurrence and well-being, should be under suspicion of ulcer or gall-bladder disease.

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## TONSILLECTOMY BY DIATHERMY

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In 1891, Nikola Tesla first suggested the medical use of that form of electricity which we now call "high frequency". In 1898, D'Arsonal commenced an investigation and in 1907, Nagelschmidt, of Berlin, demonstrated that high frequency currents produced a heating-through of the tissues and he gave this property the name of "diathermy". Since then, various names have been suggested, but as they were no more descriptive of the physics involved, they have not displaced the general approval given to the original term. There are 2 kinds of diathermy, medical and surgical; the only difference being in the degree of heat used, and, of course, in the removal of tonsils we use surgical diathermy.

There are 2 methods of destroying tonsils by diathermy; i.e. electrocoagulation and electrodesiccation, and the first mentioned is the preferred method. It is unnecessary to describe the whole technic, which has been published so often.

It is an office procedure, and is rendered painless by painting the tonsil first with pure adrenalin solution (1:1000) to blanch it, and then with a solution made of equal quantities of 10% cocain hydrochloride and adrenalin solution. Toward the close of the treatment, when we are nearing the capsule and the bulk of the tonsil has disappeared, it is well to supplement the surface anesthesia with a deep injection of 2% solution novocain into the peritonsillar region, and sometimes also into the pillars. We use a wooden or glass tongue depressor, or a hard rubber pillar retractor to hold forward the anterior pillar, and never turn on the current until absolutely sure of the exact location of the needle. If there is one point more important in the technic than

another, it is knowing where the needle point is located. The needle is inserted into the tonsil about  $\frac{1}{8}$  to  $\frac{1}{4}$  inch depth and the current, controlled by a piston on the handle of the active electrode, is turned on slowly. In from 1 to 2 seconds a white ring appears around the needle. The current is then released and the needle taken out. This procedure is repeated until the tonsil has been covered with punctures about 1 cm. apart. The number of punctures varies according to the size of tonsil and the type of patient. If patient is nervous and the tonsil small, we limit ourselves to a few applications of diathermy, but if patient is stout-hearted and the tonsil large, several areas in the body of the tonsil may be coagulated.

In order to minimize pain and soreness, the operator is advised to avoid the pillars of the fauces. For, if they are coagulated, the resulting wound is stretched and irritated by movements of the throat, in swallowing, and pain is experienced.

As regards frequency of application, it is best to coagulate a few areas about 1 cm. apart in each tonsil once a week. The length of treatment naturally depends upon the size of the tonsils; generally about 4 to 6 treatments will be required. The third, fourth, fifth and, if necessary, the sixth treatment are each distinctly different. One is working in less tissue, necessarily nearer the other throat structures, hence the need for greater care as to depth of needle penetration, and once more I want to emphasize the constant care needed as to location of the needle point.

It may seem difficult to confine coagulating measures to the tonsil, without transgressing its boundaries, and no doubt patches of the capsule will perish when the final tonsil remnants are sought out and diathermized, but control is easier than might be supposed, if the needle is being used, as one can tell by the feel when it is plunged into the tissues, before the current is turned on, whether it is lying wholly in the soft substance of the tonsil or has penetrated its harder, tougher connective-tissue envelope. It will be remembered that coagulation extends but little beyond the point of the needle. In general, one should avoid too extensive a coagulation at one

séance. By the foregoing method, carried out with care, patience and perseverance, one can destroy all tonsil tissue as thoroughly as by surgical dissection.

With regard to scarring, after completion of the diathermizing, if the applications have been cautiously and accurately made, the amount of visible cicatrization will be slight and the pillars will retain their natural shape and appearance; and contraction with distortion and narrowing of the isthmus of the fauces will be absent.

In the technic of electrodesiccation, the patient is prepared the same way and the same machine is used, save that instead of using a needle, a McFee electrode is employed and this is connected to the uniterminal of the high frequency apparatus or what is called the Oudin current. The spark is tested by bringing the electrode to a piece of metal held in hand. The machine is adjusted so that it will produce a white spark, varying between  $\frac{1}{4}$  and  $\frac{1}{2}$  inch. The McFee electrode is introduced so that its glass covering (which projects from  $\frac{1}{4}$  to  $\frac{1}{2}$  in. beyond its active metal point) touches the tonsil. The desired amount of current having been previously turned on, the spark is rapidly passed over the tonsil's surface until the tonsil is covered with a white film. In 5 to 7 days that white membrane will have disappeared from the tonsil, and when that occurs the treatment may be repeated. It usually takes from 5 to 7 treatments, depending on the size of the tonsil. There is marked shrinkage of the tonsil after each treatment.

Now a word about the action of surgical diathermy in the tissues in contact with the active electrode. Four zones can be distinguished. First of all, and nearest to the electrode, is the coagulated zone which may be subdivided into 2 areas, the desiccated and the moist. In the third zone, the cells and the walls of the blood-vessels are coagulated, but not the blood, as the electric current generates less heat in this layer. Fourth comes a zone of cells which have been killed by desiccation without being coagulated. In a further zone, sometimes called the fifth, clinical evidence shows that the tissues are sterilized of bacteria.

Tonsillectomy by diathermy is not an easy,



simple and altogether safe operation in the hands of the unskilled. One needs more than a smattering of electrotherapy, and should know the anatomy and physiology of the throat, and have some appreciation of the difference in throats, and especially the very great difference in size, shape, consistency, location, relationship and adhesions, between tonsils of different patients and even between those of the same person. Until the operator becomes skilled, the minimum current should be used.

Some of the indications for tonsillectomy by diathermy are: (1) Hemophiliacs. (2) Patients with a prolonged bleeding and coagulation time. (3) Cases of arteriosclerosis and hypertension. (4) Diabetics. (5) Cardiacs and nephritics. (6) Postoperative tonsil stumps. (7) That group of patients who prefer to endure their symptoms rather than run the risks and discomforts of the ordinary surgical operation.

There is really but 1 contraindication to tonsillectomy by diathermy, and that is—it is not applicable to children.

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## PREVENTION AND CONTROL OF LEAD POISONING IN INDUSTRY\*

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I wish to express my appreciation to the officials of the Newark Safety Council for the privilege of discussing this very timely and important subject. My interest in it is principally concentrated upon the smelting and refining processes and from the point of view of the industrial physician. I fear that I may not be able to do complete justice to such a broad subject, especially in the brief time allotted to me, so I shall review mainly the principal "high-lights". Preventive measures adopted in industry have been gradually

developed within the past decade through the work of brilliant minds and clever investigators. By their experience we may profit. My talk will contain nothing new or startling; it merely aims to present the lesson that we should derive from these investigators and its practical application in industry. A few names immediately stand out with great clearness in this field of work: Alice Hamilton, who made an exhaustive study of industrial diseases in the United States; E. R. Hayhurst, of Ohio; The Harvard Commission, comprising Joseph Aub, Lawrence D. Fairhall, A. S. Minot and Paul Reznikoff; Legge & Goadby, Sir Thomas Oliver, and R. M. Hutton, of Canada.

The value of prevention needs no discussion, as it comes under the age-old axiom upon the value of the ounce of prevention. Theoretically, it is far more simple to prevent the entrance of a poison into the system than it is to rid the system of poison and its harmful effects. For that reason, no amount of effort, time or money, is to be considered improperly expended if it prevents entrance of lead into the systems of people working under a lead exposure; industry is fully cognizant that it is money well spent and brings rich dividends.

Prevention of lead poisoning is a subject of interest to the producer, the safety engineer, and the physician, and can only be handled successfully through coöperation of these 3 agencies. Each has his own duty to perform, which dovetails and overlaps, however, to such a degree that only through amicable understanding is it possible to accomplish satisfactory results.

*Skin absorption.* There has been considerable controversy as to whether absorption through the skin really presents a danger. Years ago, much stress was placed on this avenue of entrance but recent investigators say that the skin presents a fairly effective barrier, and the small amount of lead which might possibly gain entrance that way, as compared with the relatively large amounts entering through other avenues, is not of much consequence. However, in order to accomplish perfect prevention, we should strive even to exclude that small amount, and that

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\* (Read before the National Safety Council, Division of Industrial Hygiene, at Newark, N. J., Feb. 11, 1931.)

can be attained relatively simply by measures which are well known. Adequate washing facility should be provided, with running hot and cold water, soap and towels, plentifully supplied; and by adequate washing facilities I mean not only wash-stands where the men may wash their hands, but also shower rooms in such number that workers will not have to wait their turn long enough to discourage use of the bath. It should also be an inviolable rule that men must wash thoroughly before leaving the plant, and wash their hands and scrub their teeth before eating, and it would pay to supply tooth brushes and paper cups free of charge. The men should be provided with lockers for safekeep of their street clothes while working and their working clothes while off duty, and the lockers for these 2 purposes should be different ones in order that lead dust accumulating on overalls cannot come in contact with their street clothes. At the United States Metals Refining Company, we have adopted a routine whereby men's lunches are kept in a clean, locked compartment, and given out by the foremen at lunch time, only after they have thoroughly washed their hands and teeth and put on clean smocks provided by the employer for the purpose of covering their clothes. They are also encouraged to use scrubbing brushes for the purpose of cleaning their nails.

*Ingestion.* It is an undeniable fact that, unless precautions are adopted to the contrary, amounts of lead which might prove dangerous are eaten by the workers, either through handling of their food with grimy fingers or keeping food in places where lead dust can accumulate thereon; or having lead dust or fumes deposited on their teeth and lips; or chewing on a pipe, the stem of which has proved a depository for lead; or by swallowing the filtrates of an abundant moustache. It is worth while to make a rule that men working in a lead hazardous position should have no moustache or beard, or if they have any, they should be kept closely cropped; and that smoking during working hours should be discouraged.

The ingestion of lead is still not, however, the greatest danger of absorption, for that is

easily preventable by simple hygienic measures. The most dangerous compound of lead with the alimentary canal as its source, is lead chloride, formed by the union of lead with the hydrochloric acid of the gastric juice. It is not so bad as it sounds, for the reason that the hydrochloric acid of the gastric juice, formed chiefly at the time of meals, is in most cases fully neutralized by the food. Consequently, lead swallowed during meals is not very apt to form lead chloride unless the gastric acidity is excessive. Lead compounds, however, swallowed with the saliva between meals, are a more dangerous risk. For this reason, and for other reasons that I will mention later, I am a strong advocate of having the employer supply milk at cost, to be taken not only at meal times but also before starting work and, if it can possibly be arranged, between meal hours. While considering the gastro-intestinal system, we have made it a rule in our plant to administer to each man a weekly dose of epsom salts, in some palatable combination, in order to insure his having at least one thorough evacuation per week. This fact also has a psychologic effect, as it makes clear to the men the importance of keeping their intestinal evacuation in good working order. A careful check-up is used to see that no man misses his weekly physic.

*Respiration.* Unqualifiedly, more lead enters through the respiratory tract than by any other route, and it is the most difficult avenue to control. Through the lungs a very great surface is offered for lead to enter. The cells of the lung, if flattened out, would form a much larger surface than is generally realized, and all that surface is so constructed as to provide for excellent absorption. It is richly supplied with blood vessels to bring the carbon dioxide of the blood in contact with the oxygen of the air. If that air contains lead dust it may enter directly into the circulation. To make it a little more serious, lead thus presented enters directly into the general circulation. If we could find an efficient way to exclude lead from the inspired air, it would not be necessary to read this paper; our chief problem would be solved. I



do not mean to imply that we do not have to watch lead entering through the skin and the alimentary tract, for they do represent a hazard, but I do mean to say that they represent a relatively smaller quantity and are much more controllable than the respiratory tract. Lead entering through the inspired air is also absorbed through the upper respiratory passages—the mucous membranes of the nose, mouth and throat.

*Respirators.* There has been a great deal of discussion on the use of respirators. To be good, a respirator should: (1) exclude all the lead and admit all the air; (2) be of such construction that it can be worn for hours at a time with perfect safety and comfort; (3) and be economic and durable.

To admit air and exclude lead, the frame must fit the face accurately, no matter what the configuration of the face may be. This is a big order, as no 2 faces are perfectly alike. If air is not admitted in sufficient quantity, it won't be long before the mask is decorating the forehead or the chin. The bag of the respirator should be taut, for if it collapses air will be drawn through the gaps between face and frame instead of through the fabric.

The respirator will have to be of light construction and its pressure on the face slight and equally distributed, in order to make it comfortable. If, in addition, by some magic a respirator could be devised that would enable a man to chew on a pipe and expectorate while wearing it, we would indeed be in Utopia.

Posters calling attention of employees to the hazards under which they are employed, and the preventive measures they are themselves to use, and naming the initial symptoms of lead poisoning, should be displayed, in various languages, at convenient places. Such a poster, I will quote from R. M. Hut-ton's book on lead poisoning, written for the Provincial Board of Health of Ontario. It reads as follows:

### NOTICE

#### *Suggestions to Employees—How to Prevent Lead Poisoning*

(1) All workers exposed to lead dust, lead fumes, lead solutions and lead compounds,

are liable to poisoning. These poisons get into the body through the nose while breathing, or through the mouth when chewing, swallowing, or wetting the lips.

(2) Do all you can to keep down dust. When sweeping or cleaning, always dampen with water, oil or wet sawdust. Where dust cannot be kept down, you must wear a respirator, which must be cleaned out at least once a day.

(3) Eat breakfast before going to work. Drink milk at meals, and if possible once between meals. Do not eat meals in workroom. Leave workroom at meal times.

(4) Keep dirty fingers out of your mouth and off your food, and whatever goes into your mouth. Wash hands, arms and face with warm water and soap before eating, going to the toilet, or quitting the workroom. Clean your lips and rinse out your mouth before eating or drinking.

(5) A moustache must be kept short. Do not wear a beard. Keep finger-nails clean and cut short; also remove loose skin about the nails or hands.

(6) Do not chew tobacco or gum while at work. Avoid the use of intoxicants in any form, as they promote lead poisoning.

(7) Take a full bath, with warm water and soap, at least twice a week.

(8) You must wear overalls and jumpers while at work. Wear a cap if exposed to dust or fumes. Do not wear your working clothes outside the working place.

(9) Keep your bowels moving at least once a day. Report to your foreman if you notice (a) loss of appetite, (b) poor sleep, (c) indigestion, (d) continual constipation, (e) vomiting, (f) pains in the stomach, (g) dizziness, (h) continual headache, or (i) weakness in arms, limbs or body.

Now we come to the great duty incumbent upon the safety engineer, namely, the exclusion of lead dust and lead fumes, to as great an extent as possible. I do not consider myself competent to discuss the rendering of places of lead hazard dust-free or fume-free—that is the sphere of the safety engineer. I will briefly mention that this is accomplished by rendering processes less dusty, by means of

sprinkling systems, moist sweeping of floors, whitewashing the walls, and periodic cleansing of work benches, window sills, machinery, and other objects on which lead dust might become deposited. By thorough ventilation, plenty of windows suitably arranged, suction fans, hoods, exhausts, and erection of flues, we can do a great deal toward prevention of lead dust and fumes. We can also, to some extent, prevent the formation of fumes by covering pots containing molten metal, especially during processes of agitation. We should supply tappers with long, instead of short bars, so that their faces be as far removed from fumes as possible. Mueller, of Germany, the great industrial engineer, constructed in his plant an apparatus on which tappers are able to work from outside of a closed compartment; an ideal method.

Supplying milk at cost price, as a means of encouraging men to consume it, has a three-fold value: (1) It is an easily digestible and nourishing form of food, which complements a possibly insufficient home diet; (2) neutralizes the hydrochloric acid of the gastric juice; (3) it contains calcium, which as pointed out by Aub, in some manner helps to rid the circulating blood of lead and effects its storage in the long bones in an inert form.

*Sulphuric acid lemonade.* It had been the custom in lead factories to supply the men with sulphuric acid lemonade for drinking purposes, instead of water, with the idea that dilute sulphuric acid will tend to unite with lead in the stomach to form lead sulphate, which is comparatively difficult to absorb, but some experimenters have shown that we should not give much credence to that theory and, consequently, the use of sulphuric acid lemonade has been largely discontinued.

The reason why we need industrial physicians in lead manufacturing plants is that none of the safeguards mentioned are perfectly reliable, and it is not possible with our present knowledge to exclude all lead from the system. Consequently, I will try to outline in a brief way the value of the industrial physician, but before doing so, I think that the attitude of the industrial physician needs a few words of consideration.

He should stand ready at all times to cooperate with the employer as well as with the employee. He must bear in mind the fact that it is his principal and foremost duty to conserve health and to maintain life, and his efforts should be bent in that direction. It is his duty to use zeal and judgment to see that precautions are thoroughly observed, and he should carry his enthusiasm to such extent that he might even interfere with the efficiency of some of the processes employed. When he arrives at that point he will probably be called to order by the man in charge of production, but a little over-lapping occasionally will cause interchange of ideas between the medical department and the operating department, and such discussion may be beneficial to both. Of course, the physician has to bear in mind that he has a duty to perform toward the employer as well as the employee, and should use judgment and diplomacy to correlate, if possible, helpful conditions as well as efficient production. Toward the employee his attitude should be one of sympathetic understanding. He should try to gain his confidence and make him realize that the physician is there to see that health is preserved, and, consequently, the initial symptoms of lead poisoning should be immediately reported. At the United States Metals Refining Company we have an up-to-date system of preliminary examination of each employee, in order to weed out men who might be suspected of special susceptibility to lead. It is generally admitted that dark-skinned races are most susceptible to lead; and by dark-skinned races I mean not only colored people, but also Spaniards, Portuguese, Arabians, Turks, and people from the southern part of Italy. An interesting point about Turks and Arabians I have repeatedly observed, is, that they have a *natural blue line* on their gums. It is easily distinguishable from the Burtonian line of lead poisoning, for it does not come down to the gum margin, but is still a good point to bear in mind. People below the age of 22 are more susceptible to lead than above that age, and should not be employed in lead hazards. Teeth should be in good condition, as carious teeth and pyorrheal gums will tend to become worse, and teeth even fall out, as a re-



sult of lead absorption. Alcoholics have no place in a lead factory, as alcohol and lead seem to form a vicious circle. Persons with deranged mental condition, however slight, should not be allowed to work in lead, for it is difficult to tell where such a condition might merge into the beginning of a lead encephalopathy. People having worked previously in a lead exposure or who have had previous attacks of lead poisoning should not be accepted. I wish I could tell you definitely how to determine in an exact way what characterizes the people who are more apt than others to suffer from lead poisoning, other conditions being equal, but I know of no way by which it can be determined. We do know that under identical conditions some people will develop lead poisoning much more quickly than others, and that many people can work in a lead hazard indefinitely and never show symptoms of lead poisoning. During the course of our physical examination we are careful to keep complete records of each man's condi-

tion on entrance to the plant. During his employment period, and at the time when he leaves the Company's employ, his records are carefully preserved, and he is asked to sign a statement of his history and symptoms.

Our physical examination is complete and thorough, but we go still a little further. We make laboratory analyses of the urine and blood. A regular follow-up monthly examination is made of each man. Naturally, the follow-up examinations do not have to be as thorough as the initial examination, as they are largely searches for changes that might have occurred. If, in the course of a follow-up examination, symptoms or signs appear which are of a suspicious nature, the man is put on outside work and carefully observed at monthly intervals to see whether the symptoms were really due to lead or some other intercurrent condition. A thorough physical examination is given to the men on discharge, and existing condition is checked up with that on entrance, and is so noted on the records.

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### DON'T QUIT

When things go wrong, as they sometimes  
will,  
When the road you're trudging seems all up  
hill,  
When the funds are low and the debts are  
high,  
And you want to smile but have to sigh,  
When care is pressing you down a bit,  
Rest if you must, but don't you quit.  
Life is queer with its twists and turns,  
As everyone of us sometimes learns,  
And many a failure turns about,  
When he might have won had he stuck it out;  
Don't give up, though the pace seems low—  
You may succeed with another blow.

Often the goal is nearer than  
It seems to a faint and faltering man.  
Often the struggler has given up  
When he might have captured the victor's cup.  
And he learned too late, when the night slip-  
ped down,  
How close he was to the golden crown.  
Success is failure turned inside out—  
The silver tint of the clouds of doubt.  
And you can never tell how close you are  
It may be near when it seems afar;  
So stick to the fight when you're hardest hit—  
It's when things seem worst that you mustn't  
quit.

—Anonymous.

## Collateral Reading

### NOGUCHI

(Review by the Editor)

Noguchi! Just one word, and a short one at that; being composed of only 7 letters. One word alone, and, as used here, merely the title of a book; but, *what a book*, and *what a man* this single, seven-lettered name stands for! To the question—"What's in a name?"—one may answer that there can be a great deal in a name, depending in large measure upon what effort has been made to put something there. In this instance, the author of a biographic sketch has put into a name—Noguchi: a fascinating story of the life of a very remarkable man; an outlined history of the achievements of a great scientist; an elaborate tribute of respect to a worker, considered by him to have been one of "Nature's noblemen". And, prior to the biographer's efforts, the human being who bore that name through 55 years of intense living, ere he became the subject of a biography, had himself put into that name so much of meaning that it would be difficult to find another capable of expressing equivalents. A rose by any other name might smell as sweet, but Noguchi by another name would not be Noguchi. In what ever part of the world that name is pronounced today, and it will doubtless remain true for many years to come, it will be recognized as having a peculiar and distinctive individuality. Noguchi, who came out of the East into the West with a name of no consequence, has all too soon "gone west"—in a different sense—upon his last journey, leaving a name that will be spoken with reverence, remembered and honored as that of a distinguished scientist and a benefactor of mankind.

Gustav Eckstein, in a book entitled, *Noguchi*, has produced a biography of unusual character. It is published by Harper and Brothers, and priced at \$5; and we have no hesitancy in saying that it is worth that sum of money to any physician interested in ascertaining the causes of disease or even merely in medical history. From the literary point of view, it is a unique piece of work and there are many things about it that merit criticism, to say the least; many violations of literary rules that deserve condemnation, and we are surprised that the publishers have turned out a book so poorly edited. Every author has a right to employ a style of his own, but style is one thing and gross carelessness or abuse of good English is quite another. Nevertheless, despite its serious and annoying defects of a literary character, the book has a distinctive

value, and we can overlook some of its many faults in consideration of some of its excellencies. On the whole, we think that Eckstein has done a fine thing, and done it in a fine way; allowing for his own literary eccentricities. Apparently, he had a difficult subject to handle, and the fact that he has so satisfactorily performed the task by methods different from those of other biographers is all the more creditable. It may be that he is as much a genius in the field of biography as Noguchi was in the field of bacteriology; of that we make no pretense of ability to judge, and we offer this limited criticism only because it seems to us a pity that such a praiseworthy contribution to literature should be marred by so many glaring faults—as measured by ordinary standards.

Now, returning to the matter of greater importance, the book as presenting the life story of a very remarkable member of the medical profession, we are pleased to recommend it for your reading. The story is of a type familiar to physicians and workers in the realm of science: a boy born of lowly parents, and, through the death of his father, left to the care of a widowed mother; crippled in babyhood by an accident which rendered his right hand useless; helped to a partial restoration in later years by a skilful surgeon; determining then that he would become a physician so that he might help others; overcoming all obstacles in the way of that decision; working his way to the front rank of scientific investigators; making discoveries that prove to be of incalculable benefit to humanity; receiving recognition among and by the greatest as a scientist of the highest character; then, without any "heroics", but with that humility which characterizes the bravest of men only, giving his life nobly in a final, desperate effort to rid the world of one of the most virulent diseases.

It is not feasible in an article of this sort to make reference to other characters mentioned in the book under consideration, but it would certainly be unfair in this case to omit mention of one whose spiritual presence is felt on every page. The biographer does not paint his hero as a god; he shows the ugliness as well as the beauty spots, and, at times, makes him detestable. But, all the way through, you will feel that the mother of the hero is a living angel.

His life ended, as he probably clearly foresaw that it would, in a death struggle with yellow fever; ended for him as a martyr to the cause—that great cause which embodies the spirit of preventive medicine, and would wipe disease from the face of the earth.

Noguchi, physically, is dead; but in his name his spirit goes marching on.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

## PUBLICATION COMMITTEE

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## CRIPPLED CHILDREN'S COMMISSION

The General Assembly of New Jersey, in 1929, passed an Act providing for a Special Commission to make a census of all the crippled children in the state, and in due time all physicians were asked to aid in that task. The profession responded, of course, and as one result of several conferences between the Chairman of the Commission and the Chairman of our Welfare Commission, with the Executive Secretary acting at times as an intermediary, and the State Board of Health coöperating when necessary, a plan was devised whereby birth certificates now carry provisional space for recording blemishes or physical deformities of the newly born. With a reasonably accurate census completed, and provision made for hereafter recording prenatal defects and birth injuries, the foundations are laid for recommending such assistance—medical, surgical, or financial—as may be needed by that class of unfortunates.

Whoever conceived the idea originally had a noble inspiration; and all who participated in developing the plan have shown a very humane disposition. It appears further that a considerable group of kindly disposed citizens has indicated willingness to supply the philanthropy which may be required to restore to health or to a more comfortable state of living, many children who would be unable by themselves to procure proper treatment or mechanical aids.

Into the General Assembly of 1931, an Act was introduced, the purpose of which was to replace the temporary, census-taking, commission by a Permanent Commission, consisting of 11 members, "to care for and to treat" the classified list of crippled children in New Jersey. The proposed law specified that the Governor, in appointing the Commissioners, must name 1 Shriner, 1 Elk, 1 Rotarian, 1 Kiwanian and 1 Lion, at least, but, although the Act very specifically provided for diagnosis and medical care of disease conditions, no mention was made of the *desirability*—not to say *necessity*—for including in that commission's personnel a physician or anyone (presumably) possessed of medical knowledge. We hope the omission was merely thoughtless; it seems improbable that there existed an intent to exclude physicians from a board whose work would necessarily deal to a large extent with medical problems. But, such omissions have been characteristic of much legislation during recent years, whereby laymen have been placed in charge of strictly medical affairs.

In this instance, at any rate, the profession interfered and secured an amendment to the Act before it was passed by the Legislature; and in that fact we find a lesson for future consideration. Having noted the peculiar wording of the Act, when examining "new bills introduced", the Executive Secretary reported it to the Welfare Committee and suggested presenting an amendment that would

require the addition of a member of the Medical Society of New Jersey to the galaxy of organization representatives already named. His suggestion was accepted, and authorization was given to urge such amendment. The sponsors of the Act readily agreed to make the alteration; in fact, the change was made with apparent enthusiasm. It is another proof of the value of coöperative efforts at the right time.

At the annual meeting, President Sommer, after conference with the Board of Trustees, submitted to Governor Larson the names of 3 members, from which list 1 should be selected for appointment, as the representative of this Society upon that very important commission. We have just heard that Dr. B. F. Buzby, of Camden, has been chosen, and we think this is an occasion for congratulating both Dr. Buzby and the State Medical Society.

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### GROWING IMPORTANCE OF MENTAL HYGIENE

In her Annual Report, our Field Secretary related the increasing interest of the laity in her educational work, and especially referred to the reception accorded her lectures on mental hygiene, the topic which had been selected for first place in last year's repertoire. She commented particularly upon the *sustained interest* in the Society's health talks—as showing satisfactory development of our educational work—and upon the wider recognition, by other organizations, of the instructive and coöperative efforts being presented by the medical profession in New Jersey. The State Department of Education, and the Parent-Teacher Associations, to name only 2 of the most important organizations referred to above, have not merely aided us materially in providing audiences but have been very encouraging in urging continuance of our program and expressing approval of the character of information and advice that we give; as Mrs. Taneyhill expressed it, "their effective support has been a vital factor in our accomplishment."

While adding 2 new subjects, "Common

Colds" and "Medical Quackery" (prepared during the recent summer months), to her list of available lectures—thus offering 7 topics from which lay organizations may choose—"Mental Hygiene" will probably be given the greatest emphasis for at least another year because of its present importance. The problem of caring for its mental defectives has become in some of our larger states—in which group we include New Jersey—a very serious matter. A comprehensive study of the budgets of our largest, wealthiest and most enlightened states, such as New York, Pennsylvania, Massachusetts and New Jersey, with special reference to expenditures made on behalf of mental defectives, will shock anyone who is for the first time making such an investigation; the total amount of such expenditure in any one of the states mentioned, in comparison with the sum spent for any other single purpose, is almost unbelievable; i. e., the proportionate sum of money is so amazingly large. To the tax payer the problem is becoming each year increasingly serious.

The distinctly financial aspect of the question is not, however, the only one of importance. The manner in which defectives hamper, and the extent to which they interfere with and raise the cost of our public school plans, constitute another highly important problem. So, too, does the present so-called "crime wave" have to be thought of in connection with impaired mentality; and there we have to consider a wide range of possibly related questions, such as heredity, environment, education, and modes of treatment or punishment.

An editorial in the Pennsylvania Medical Journal, May 1931, discusses the relationship of "mental hygiene to unemployment"; which brings out an entirely new aspect of the physician's need for greater knowledge concerning the utility of mental hygiene.

In the Virginia Medical Monthly of July 1931, the President of the Medical Society of Virginia, Dr. J. Allison Hodges, called attention to the significance of the announcement that "Mental Hygiene in Its Relations to General Medicine and the Public" would be the leading topic for consideration at his State



Society's Annual Meeting; commenting as follows:

"This is probably one of the most dominant subjects before the profession at this time, and it is almost inexplicable that it has not earlier aroused the attention and energized the activities of the profession; consequently, this discussion should be of the greatest possible interest to all members. To make a complete diagnosis, as well as prognosis, of any case that is not acute in its manifestations, is almost impossible without a thorough study of the mental element in the person and life of the patient. The family physician is more often consulted for mental and functional disorders than for all other ailments combined. There is a reciprocity of interest between the psychiatrist and the general practitioner in the treatment of physical and mental disorders, and intelligent coöperation will lead to greater success in overcoming the problems of mental deficiency, and solve other tasks confronting the management and treatment of the intellectually subnormal. About 13% of the population of the United States is intellectually subnormal or composed of retarded individuals, who nevertheless may be apparently socially adequate, and the situational factors in these borderline cases must be thoroughly studied so as to be correctly interpreted. If these patients, who are frequently involved in antisocial behavior, are correctly estimated in early life, the results leading to crime and delinquency may be largely averted.

Psychiatry is no longer the 'step-sister of Medicine, but a respected member of the family of the medical arts and sciences', and it is our professional duty to recognize such a fact and prepare general practitioners as well as specialists and internists to cultivate a skill and interest in the early recognition of mental disease and personality disorders in children, so that our civilization may be advanced, while at the same time it is protected by full knowledge of all of these associated factors in private and public life.

We welcome an opportunity that will popularize this mode of thought and action, and believe that this discussion will open new fields of investigation and research work for many who have not heretofore considered this subject."

All in all, we think our Field Secretary has acted wisely in giving her "Mental Hygiene" lecture so prominent a place in our public educational program, and anticipate that the profession as well as the public will profit largely by her work.

## AN APT PHRASING OF MEDICAL ETHICS

In the opening session of the House of Delegates, at the Asbury Park meeting, in the course of presenting important correspondence, Secretary Morrison read a letter which he had dispatched to the Secretary of the American Medical Association, Dr. Olin West, in response to the latter's request for an opinion upon an ethical problem which had been presented to the national organization. That problem was—whether the Principles of Medical Ethics should be so amended as to remove existing restrictions and make it ethical for physicians to obtain patents on instruments, appliances, methods of production of therapeutic products, and on medicinal agents used in the treatment of disease.

Dr. Morrison's response, read to and endorsed unanimously by our State Society, and published in the Transactions (Aug. Sup., p. 5), merits the announced expression of approval and deserves to be read by every member of the profession. Lest it should become buried in the records, and thus escape the notice of some members, we take this means of directing toward it your special attention. He said:

"I believe that the members of the Medical Society of New Jersey would vote, by a very large majority, against permitting a physician to receive, under our code, a patent right on any instrument, appliance or remedy to be used in the alleviation of human suffering. Such action, if endorsed by the profession, would not only favor that tendency toward commercialism which has recently threatened to become rampant in our ranks but would submit us to further adverse criticism by the laity. Why should anyone be permitted to commercialize pain, or sickness, or the remedies for suffering? Our position differs from that of the mechanic or manufacturer who invents or produces a time-saving device or a labor-saving machine; we cannot apply their business principles to our dealings with human lives. The past history of medicine is

illuminated by the names of medical heroes who have given years of toil, and even spent of their own substance, in efforts to reduce human suffering. What glory would have attached to their names had they wrung from sufferers exorbitant royalties in payment for their discoveries?

As a practical application of the principle, consider the construction of the Panama Canal. Would that piece of work ever have been completed, if the builders had been compelled to pay the royalties of patent rights upon the means of controlling yellow fever? Certainly not! Or, think of the prevention and cure of diphtheria, the means for which are now at the command of every municipality in the world, and consider whether that would have been true if the results of scientific work with that disease had been patented. Or, again, would it be in keeping with the ideals of the medical profession, to compel one physician to pay financial tribute to a fellow physician for some instrument or remedy the latter had discovered?

Think! The Great Physician might have made himself the richest man in the world's history, had he put a monetary price upon his prescriptions for salvation.

No! We still approve of keeping in the code that section which provides—*It is unprofessional to receive remuneration from patients for surgical instruments or medicines; or to accept rebates on prescriptions or surgical appliances, or perquisites from attendants who aid in the care of patients.*"

Aside from being an expression of the Secretary's personal opinion, and later a recommendation from this state society, Dr. Morrison's letter constitutes a timely reminder to members of the medical profession—in an age when, perhaps more than ever before, a man's financial rating is the measure of his success, and when the temptation to convert personal knowledge or skill into gold is certainly greater than in former times—that adherence to our self-imposed, idealistic principles of conduct is yet the brightest gem in the physician's crown.

## Medical Ethics

### CHARACTER—DECENT CONDUCT

(From The Kalends, Williams and Wilkins Company.)

Was it not Shakespeare who caused Cassius to say: "Upon what meat doth this our Cesar feed, that he is grown so great?" Gentle Will, although taboo to modern *unco guides* because of his reputed fondness for brown October ale, knew vastly more about life than do the godly elect who foolishly quench their thirst with insipid water. The Bard of Avon put into the mouth of Cassius a question which is pertinent today, for many there are in this broad land of ours who are afflicted with superiority complexes.

Throughout America, in the nation, in the state, in the city, in the village, in the office, in the shop, and even in the *American Mercury*, are found those who feel superior to their fellows, and we lesser folk wonder, as Cassius did about Cesar, how and by what right they get that way.

The desire to appear superior is universal. It is not restricted geographically, politically, or socially. Like hooley, it may be found everywhere. What to do? For the benefit of the largest number would it not be fair to establish a standard by which all men and women might be measured honestly to determine whether they are or are not really superior.

What should such standard be? Wealth? Birth? Intelligence? Education? If one of these, why?

Wealth is not a proper standard because the wings of wealth are proverbial, and a standard must be enduring. Also, the mere possession of wealth may be strong evidence that its possessor is a damned scoundrel. No, wealth as a standard of worth must be quickly buried in quick-lime to prevent a stench.

Well, how about birth, so long accepted as a standard of excellence? Certainly no man or woman desires credit for being born; it is patent that not one of us is consulted about it. The basest-born "enjoys" that experience in common with the bluest of blue bloods. Then, too, is it not true that many of the *haut ton* have ended their careers in felon's graves? No, accident of birth cannot be a standard, for a standard of worth must hold true in *all* cases.

How about intelligence and education? Surely, it might be assumed, intelligence plus education is an index of superiority. Possibly so, in a few instances, but how account for the intelligent and educated rascals with which



our jails are filled, and for the vastly larger number of such rascals which the commonalty secretly envies because of their ability to escape incarceration? That is, the ability to "get away with it". No, intelligence and education have little to do with real worth. Criminals, rakes, and roudés are seldom simpletons.

What then remains as a standard with which to judge men? Is there one? Yes, a primal one. One that is too often forgotten—that of *decency*. All men, rich or poor, high-born or of low degree, educated or uneducated, stupid or intelligent, *all* can conform to this standard if they will. Before such a standard all men meet upon a common ground, and it is a standard which is fundamental and not subject to change. The truth residing in Pope's lines is eternal: "Honor and shame from no condition rise; act well your part, there all the honor lies."

## Esthetics

### ROADSIDE ESTHETICS

(Editorial. New York Times, July 23, 1931.)

It is good to learn from the American Civic Association's current bulletin that something is being done to preserve roadside beauty. California has lately destroyed 50,000 objectionable billboards along her highways. "Now, when we invite our friends to come and see the wonders of the world", says The Los Angeles Times, "there is reason to hope that we will not have to conduct them down a dark alley of ads." Maryland hotel men have agreed to discontinue this form of advertising. Others could afford to follow their example, since a lurid sign must repel at least some prospective patrons. Much recent legislation is aimed at the growing nuisance of the automobile "graveyard"; the industry itself is at last giving attention to that problem. In Massachusetts the Supreme Judicial Court now has before it the long-awaited special master's report dealing with the local billboard law. "Beauty in the sense intended and employed in the framing and administration of these rules and regulations", the master says, "has in fact a real and substantial economic value to the Commonwealth."

His findings may ultimately be debated before the Supreme Court of the United States. But it will be a long day before roadside esthetics can rest on regulation alone. Zoning may in time stretch its mantle over them, taxation may help to drive out of business those who would destroy them, here and there an advertiser may coöperate, but the final arbiter must be public taste. America may be reviled

for her slovenliness by critics from other countries—a German author calls her a "Billboard Paradise"—but she is not the only sinner. In the introduction to the year book of the British Design and Industries Association, Clough Williams-Ellis indicts the civilization which is "fouling its own nest" and desolating the English countryside. Desecration has not gone so far there as here. Rural regions remain something to be walked over and not whizzed by. To our score of hikers along, say, the Green Mountain Trail, Devonshire has its hundreds—even if they must dodge, now and then, the trippers in their chars-à-bancs.

## In Lighter Vein

Odd that the King of Siam had to come to the driest country on the globe for an eye-opener.—Ohio State Journal.

A White Plains church holds service for golfers at 8 a. m., but we think that is a serious mistake. Golfers need service more after the game than before.—Albany Evening News.

What we should like to know from Professor Piccard is whether the clouds, viewed from the other side, showed any silver linings.—Virginian-Pilot.

Any rum racketeer in the big cities is in the near-bier business.—Arkansas Gazette.

### Not Now

Isaac (to Abie while bathing): "Abie, can you float alone?"

Abie (impatiently): "Dun't talk beesnuss now, Isaac. Call me at the office tomorrow."

### Quick Trip

First Angel—"How'd you get here?"

Second Angel—"Flu."

### So

Mrs. Nodimes—"Is your husband tight, like mine?"

Mrs. Nickless—"Is he? Say, every time he takes a penny out of his pocket the Indian blinks at the light."

### Little Surprise

"Joe has a glass eye."

"Did he tell you that?"

"No; it just came out in the conversation."—The Wampus.

### Accident to an Optimist

Waitress—"Oh, I'm sorry I spilled water all over you." Patron—"That's perfectly all right, the suit was too large anyway."—Drexel Drexlerd.

### Bloom Still On

"Eliza", said a friend of the family to the old colored washer-woman, "have you seen Miss Edith's fiancé?"

"No, ma'am", she answered, "it ain't been in the wash yet."—Jack-o'-Lantern.

## Lighthouse Observations

### WHY WE REACH FOR THAT SWEET

In the Journal of August, 1930 (page 691), we presented in this column the report of some investigations concerning the value of sugar as an emergency stimulant. Under the caption—Cake for Tired Working Girls—evidence was submitted in support of the natural craving for sweet meats and of the fact that waning energy can be revived rapidly by an intake of sugar in any form.

This month we are copying from the Literary Digest of June 13, 1931, another reported experiment, the results of which indicate that the boy or man who desires 2 desserts with his dinner is not by virtue of that fact alone—an imbecile. The report follows:

Take one small boy and place before him two dishes, one filled with spinach and the other with cookies such as grandmother used to make. Leave the room and try to guess which of the dishes will be empty when you return. Will the boy reach for a sweet or a vitamin?

This simple experiment is sketched by *The Lab Log*, of Colgate University, Hamilton, New York, in its record of a series of reports just completed by 2 groups of research workers in the Hamilton psychologic laboratory concerning the factors involved in every-day eating. That small boy, it seems, is no exception. Everybody naturally reaches for a sweet. Sweets stimulate the flow of gastric juices.

The "inside information" is given in *The Lab Log*:

"Many balloons have been swallowed and not a few miles of smoked paper have passed over kymograph drums, recording stomach contractions, flow of saliva, and the response of gastric juices.

Measurements of the latter have perhaps furnished the most sensational data on the psychologic reaction to foods. The rate of gastric secretion was determined by chemical analysis of samples obtained from the stomach. The subject ate a test meal, and at 15 minute intervals a sample of the stomach contents was secured through a tube. Analyses showed that there is some slight increase in the secretion of gastric juice from seeing, smelling, or thinking about food. The really significant increases, however, resulted from *tasting* food. Sweet desserts gave the greatest secretion, with meat running second. It was found that salty tastes stimulated to a slight degree the gastric juice to flow, while bitter or sour tastes have no effect. Sweet tastes are by far the greatest stimulators of gastric juices, and of all sweets a chocolate bar was found to have the greatest effect. Chart records indicate that the gastric juice begins to flow as soon as the first taste of food reaches the mouth, increasing steadily until, within about 1 hour after dinner, it reaches its peak, diminishing rapidly after that time."

Between 1 and 2 hours after eating a normal meal, the Hamilton account adds, the natural flow of gastric juices approaches the vanishing-point. But unfortunately all the food in the stomach had not been completely digested by this time, and more gastric juices were needed. It was found that:

"Sweet taste acted as the greatest stimulator, and in order to bring the gastric flow back somewhere near the level it attained during the meal,

further sweets were given. The results were immediately obvious.

It is therefore possible to draw the conclusion that a second dessert, taken 1 hour after dinner, or a few pieces of candy or some sweet cakes, are not only pleasant aftermaths to the dinner but also a valuable psychologic aid to digestion. The records also permit the conclusion that a sweet taste during the course of a meal—such as sherbet with the heavy course—will help to keep the flow of gastric juice up to full requirements.

Records of stomach contractions while the stomach is at work digesting food show that salt and bitter tend to inhibit these normal contractions, while sweet and sour have a practically negligible effect. The stomach contraction apparatus and saliva recorder were used in this work. Sweet and salt tastes had a generally stimulating effect on the flow of saliva, while sour and bitter caused a brief spurt, followed by a diminished secretion.

The elementary tastes of sweet, sour, salt, and bitter have been used for the experimentation so far, although some work has been done with complicated foods."

## Public Relations

### MEASUREMENT OF NOISE

(In the August Journal we published an original article entitled "The Noises of Civilization and Their Evil Effects", by Dr. Walter A. Wells, a distinguished American otologist, and a copy of the Journal having reached us in Lucerne, Switzerland, we had just looked it over once more, in printed form, when we fell upon a somewhat facetious editorial in the London Times of that day, September 3, which we herewith reproduce):

We have all heard of noise. At quite an early stage in our earthly pilgrimage a special connection between noise and ourselves was more than hinted at, and as the years have passed we have gradually changed from being accomplices to being judges. It is one of the privileges of being grown up to be able to adjudicate upon noise, and to declare that it is intolerable and simply must be stopped. It is a comfort in middle age to have science upon one's side, and to hear that the instruments have been invented which can measure noise exactly. No longer will it be possible for the more self-assured of the young to enter the room with blatant lies upon their lips, denying that in fact they were making any particular noise. The men of science now know how to measure noise with extreme exactitude, and recently *Nature* had an article from the pen of Dr. Kaye, the noise-measurer, which tabulates all noises which must put a man off his work, from the rumbling of a tramcar to the snarling of a Bengal tiger. Perhaps the greatest of all the afflictions of a loud noise is that it prevents one (and we have all been one in our time) from hearing oneself speak. One has protested afterward at noise so unmannerly, and one has been, perhaps, disbelieved. Now science has produced measurements, and can show incontrovertibly that above a certain pitch of noise the human voice simply cannot be heard.

Noise is so real a menace to life today that a special means of measuring it has had to be invented, a means called *decibels*, by which intensity of noise can be measured. Seventy decibels mean that 7 noughts follow, that is to



say that the intensity is 70,000,000 strong, while 30 decibels mean that no more than 3 noughts follow—a paltry 1000 intensities of vibration. Armed with this measuring rod, so well suited to geometric progression, the man of science can prepare his tables and can show that whispering is really very much more polite than thunder or church bells, because whispering, when measured at a distance of 5 ft., yields 10 to 40 decibels of noise, while church bells yield 60 decibels, and thunder 65. Thunder is just the same, in the eyes of science, as the dog barking, which is also 65 decibels, but science shows that we have reason to be thankful for our dogs, and for not living in the jungle, because the Bengal tiger snarling at a distance of 15 ft. registers 75 decibels, and the Siberian tiger roaring, no less than 7 ft. away, registers 80 decibels, while a lion roaring (in the New York Zoo at 18 ft.) has no difficulty in showing 85 decibels on the score. This last figure is exactly the same as the figure yielded by Niagara Falls when tested at the loudest spot. Such noises are, as is only to be expected, considerably less than some noises very much more familiar. The pneumatic drill, which we all hear in the streets, registers 90 decibels, or 9,000,000,000 intensities, and so does the printing press room in whose proximity journalists do their deep and thoughtful work and formulate their judgments upon the state. As for aeroplane cabins ("at least a thousand times noisier than an express train", says the report), the noise inside them is anything from 80 to 110 decibels, intensities of noise so shattering that they explain immediately why so many people ride in aeroplanes once, and no more than once.

Where the new measurements are likely to prove particularly valuable is in those chronic railway carriage controversies. Victory will now rest with the traveler who knows his science. It has been established that opening the carriage window increases the sound by 5 decibels for every 10 miles an hour in the speed. One of the chief methods of measurement in use is to collect the sound in a cloth and then to measure the amount of heat generated, a method which presents some difficulty when it is desired to place upon permanent record the degree of angry loudness of some dissatisfied visitor, whose lack of an accommodating spirit further shows itself in an unwillingness to give an encore for the benefit of science. But, though there are these troubles in individual cases, noise is such an intimate friend today that we must be glad of any news of how it is getting on, as it undoubtedly is. Even if the measurements seem strange and do not seem to allow enough for sheer aggravation, at any rate it is much to know that we are on measuring terms with something which plays so great a part in all lives.

## School Health Department

### CAFETERIA AND LUNCHEON

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Public Instruction, Trenton, N. J.

Sanitary measures are essential in a school cafeteria or lunchroom. The health of food handlers should be beyond question. An annual examination of these workers is important. Food handlers should be given printed instructions con-

cerning their part in a prevention program. They should be cautioned about coughing over food; about the use of the hands while serving, and about the selection of foods to be served.

The methods employed in washing dishes and utensils should be carefully studied to insure absolute safety. The school physician and the health officials can advise on this point.

Milk used at school should be of high standard and purchased from a reliable dealer. Precautionary tests annually are advised. Grade A pasteurized milk from tuberculin-tested cattle is a good standard for schools.

### NEED AND SCOPE OF RECORDS AND REPORTS

- (1) To record pupil health status, hence, pupil health needs.
- (2) To make the health findings available to parents, teachers and others working with the pupils.
- (3) To measure results.
- (4) To facilitate coöperation between the health department staff and the administrative and teaching staff.
- (5) To estimate from day to day the incidence of communicable disease and to properly account for absences, exclusions and readmissions.
- (6) To record health service rendered.
- (7) To establish a guide whereby the efficiency of the staff can be estimated.
- (8) To furnish the administrator with a statistical picture of accomplishments and needs for administrative or publicity purposes.
- (9) To record the sanitary conditions and needs of buildings and equipment.
- (10) To account for costs of school health department.
- (11) To obtain permission for treatments.
- (12) To provide duplicates of certain forms in the language predominant in the community.

### STANDARDS

- (1) Uniformity throughout the system.
- (2) Permanency of individual records for duration of the pupil's school career.
- (3) Simplicity but in necessary detail.
- (4) Availability to those using them.
- (5) Accuracy, neatness and legibility.
- (6) Utility.

### FOLLOW-UP PROCEDURE

Any measure supplementary to the health examination and which uses the findings of the examination as the basis for adjustments, corrections and recommendations in the interest of child health and education.

Notification of parents by one of several methods.

Home visitation by physician, nurse or teacher. School visitation by parent upon invitation to confer with physician, nurse or teacher.

Periodic reference to records to renew corrective efforts with needy cases and to measure results.

Systematic reference of examination findings to the teachers together with explanations and recommendations concerning adjustments and management in individual cases.

Motivation of health training and instruction through the study of individual and group needs as revealed by the examination.

Adjustment by the principal of programs, schedules, pupil load, extracurricular activities,

etc., when shown by the composite findings of the examination to be needed.

Home coöperation secured:

- By letters and literature.
- By visitation.
- By general publicity.
- Through Parent-Teacher Association.

Coöperative arrangements with clinics, hospitals and specialists whereby special examinations and tests may be insured for selected needy cases:

- Psychiatric and psychologic.
- Urine; sputum; blood.
- X-rays and fluoroscopic.

Personal conferences with pupils.

Discussion conferences with classes or groups having similar needs.

## Woman's Auxiliary

### WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

(This report is, by special permission, reproduced from the Journal of the Indiana State Medical Society, July 1931.)

Again it is the pleasure of this writer to review the high points of another annual session of the Woman's Auxiliary to the American Medical Association; this time, the ninth, was held in Philadelphia, June 8 to 12. It was the first time that the Woman's Auxiliary was in complete charge of the entertainment for all visitors, members of the families of physicians. Highly successful were the arrangements for the Auxiliary meetings at the Bellevue-Stratford Hotel, and the entertainments, fulfilling the hopes of the Convention Committee (made up of women from Pennsylvania, New Jersey and Delaware) that we "carry away a vivid impression of Philadelphia as a great medical and cultural center, and a city abounding in hospitality".

The official Auxiliary program began Monday with a luncheon in honor of the Auxiliary presidents, followed by a round table conference on (1) program for county auxiliary meetings; (2) the technic and value of a committee on public relations; and (3) history and archives.

The National Board dinner at 6 o'clock preceded the pre-convention Board meeting with the President, Mrs. J. Newton Hunsberger, Pennsylvania, presiding. Short reports were given by officers of the Auxiliary and chairmen of standing committees. The budget and proposed changes in the Constitution were discussed, and the nominating committee elected.

The general meeting on the Roof Garden of the Bellevue-Stratford Hotel began at 9 o'clock on Tuesday. After singing "America", the invocation and an "In Memoriam", with the audience standing, Mrs. Hunsberger read the Presidential Address; its record of untiring labor and accomplishments, stressing the value of personal contact, elicited much applause. Mrs. Harry C. Podall, of Pennsylvania, Corresponding Secretary, read of the clerical work involved in this growing organization.

Mrs. Fred L. Adair, of Illinois, Treasurer, reported bills paid and more than \$2000 in the treasury.

Mrs. Southgate Leigh, of Virginia, First Vice-President and chairman of organization, told of

the division of territory among the 4 vice-presidents, and the 4 surveys prepared during the year and sent to editors of state journals for publication; the formation of a state auxiliary to the North Dakota Medical Association, which makes 38 states in the process of organization, with New Hampshire and New Jersey completely organized; the 12,494 paid members in 9 years represent a victory for ardent workers, especially when one considers the difficulties in perfecting auxiliaries.

The report of Mrs. E. V. DePew, of Texas, chairman of the Program Committee, was read by Mrs. A. T. McCormack, of Kentucky. Reference was made to the popularity of the study envelopes, particularly the one on "Communicable Disease Control", which is used not only by auxiliary groups but by other women's organizations. Several states have their own study programs prepared by their medical associations; among these are Oregon and Illinois. It also was brought out that—"Aggressiveness on our part defeats our purposes."

The report of Mrs. Elmer L. Whitney, of Michigan, Chairman of Legislation, was read by Mrs. McCormack. Mrs. Whitney urged county presidents to have 1 meeting devoted to legislation in order to educate members as to movements of vital importance to the medical profession, saying: "If each of our 12,000 members were well-informed, we would be of incalculable strength."

Mrs. T. O. Freeman, of Illinois, Chairman of the Finance Committee, gave a black-board comparison of expenditures of the outgoing administration and the present budget. Mention was made of the Auxiliary playing cards, the back of which are decorated with the "better half of the caduceus"—our official insignia.

Mrs. A. Haines Lippincott, New Jersey, Chairman of the Public Relations Committee, reported a comprehensive study of the opportunities for service awaiting well-informed auxiliary members.

Mrs. R. N. Herbert, of Tennessee, Chairman of the Hygeia Committee, reported sending out over 3000 pieces of mail; that 110 auxiliaries had sent in their quota of subscriptions; that there were 325 more auxiliary subscriptions than last year; that Tennessee had a *Hygeia* float in the May Day parade. Mrs. Herbert gave radio talks featuring *Hygeia*, and read a paper on "Educate with *Hygeia*" before several audiences.

Mrs. Wayne Babcock, of Pennsylvania, Chairman of the Revision Committee, read the changes suggested by the committee and recommended from the pre-convention board meeting; they were adopted.

Mrs. John O. McReynolds, Texas, Chairman of Press and Publicity for State Journals, expressed her appreciation of the coöperation received from State Society Journal Editors and the response to questionnaires sent out—many of the answers will be put into form for study and enjoyment. Mrs. Walter Jackson Freeman, of Pennsylvania, Editor for the American Medical Association *Bulletin*, reported 9 letters containing accounts of activities over the Auxiliary world. She said, too: "I always stressed some phase of the convention plans to create interest." (Over 1100 women registered at the convention.) Furthermore, the subscription to the *Bulletin* is only 50 cents. Mrs. Freeman was in charge of the distribution of treasurers' receipt blanks; 1000 books were ordered, 831 used; she advises presidents to have a supply of these for state meetings.

Mrs. Edgar S. Buyers, of Pennsylvania, Chairman of the Printing Committee, reported expenditure for booklets, programs, etc.



The Historian, Mrs. S. C. Red, of Texas, Founder of the Woman's Auxiliary to the American Medical Association, and its first president, spoke first of the systematic filing of Auxiliary doings, and second, of her interest in the history. Mrs. Red recently compiled a history of early medicine in Texas, entitled "The Medicine Man in Texas"; this is to assist in establishing a loan fund for medical students in Texas. Mrs. Red's book has received very favorable comment.

After luncheon the ladies had their choice of: (a) Trip to Valley Forge; (b) trip on Delaware River; (c) visit to Historical Society of Pennsylvania; (d) visit to Print Club.

Following the general meeting of the American Medical Association with Dr. William Gerry Morgan, of Washington, D. C., retiring president, and the address of Dr. E. Starr Judd, of Minnesota, incoming president, hundreds met again in the ball room of the Bellevue-Stratford Hotel, at the supper dance in honor of the Woman's Auxiliary.

Most of Wednesday morning's meeting was devoted to state reports—the Indiana report written by Mrs. William S. Tomlin, Indianapolis, was read by Mrs. F. W. Cregor. One notes a broadening of the work in the various states as a better understanding of possibilities develops. Pennsylvania is now the banner state with over 1900 members, an increase of more than 200 in the year.

The Nominating Committee, Mrs. S. C. Red, of Texas, Chairman, presented the names of Mrs. Walter Jackson Freeman, Philadelphia, President-Elect; Mrs. James Blake, Minnesota, First Vice-President; Mrs. James F. Percy, California, Second Vice-President; Mrs. J. Ralston Wells, Florida, Third Vice-President; Mrs. Robert W. Tomlinson, Delaware, Fourth Vice-President. With their election a rising vote of thanks was extended Mrs. Hunsberger, who presented the gavel and president's pin to her successor, Mrs. Arthur B. McGlothlan, of St. Joseph, Missouri, elected at the Detroit session. After felicitations to Mrs. McGlothlan, the meeting adjourned, and the members assembled again at the annual Auxiliary luncheon, with guests and speakers from the American Medical Association. Mrs. Hunsberger presided, and Mrs. Joseph J. Meyer, of Pennsylvania, was toastmistress. Mrs. Meyer introduced Dr. E. Starr Judd, who expressed his pleasure at attending such a large gathering of Auxiliary members, and spoke of the excellent condition of the Auxiliary in Minnesota; he then reviewed scenes of other days, mentioning that in 1847 when the American Medical Association was organized in Philadelphia, women were present, and that in 1850 in Cincinnati, they were active in social gatherings. Dr. Judd spoke of Mrs. Mayo, the mother of Dr. Will and Dr. Charles Mayo, former Presidents of the A. M. A., that during the Civil War when Indian outbreaks in Minnesota kept many men at home, Dr. Mayo was sent to Mankato and New Ulm following a fresh outbreak, and Mrs. Mayo became the doctor of the community as soon as her husband left, wounded soldiers being brought to the aid station she established. He also told of her heroic work during a diphtheria epidemic. Dr. Judd closed his remarks by saying that she was an example for all, for she took over the activities of her husband and carried on—the real purpose of the Auxiliary.

Dr. Walter F. Donaldson, Pittsburgh, spoke of the Medical Benevolence Fund of the Medical Society of the State of Pennsylvania, which now amounts to \$87,000; \$6000 was contributed by the Woman's Auxiliary. The fund is to give pecuniary

aid to the members of families of physicians. Among others introduced was Dr. Joel T. Boone, personal physician to President Hoover.

In the afternoon there was a trip through historic Philadelphia with tea at Stenton, the home of James Logan, 1728, friend of William Penn. This writer elected a visit to the exhibit in the new Municipal Auditorium, having heard it said that it was "the best yet"; it justified such praise. Then, under the guidance of Mrs. Walter Jackson Freeman, a visit was made to the College of Physicians.

Wednesday night, the Woman's Auxiliary to the Medical Society of the State of Pennsylvania entertained at a reception, with a musical program and buffet supper in the University Museum; the program was presented with the compliments and best wishes of Dr. William W. Keen, President of the American Medical Association 1900-1901.

Thursday morning Mrs. Arthur B. McGlothlan presided at the general round table conference. In her Presidential Address, Mrs. McGlothlan outlined her plans, saying "There is nothing new to offer in policy", that she would "further develop the already established policies and give aid to state auxiliaries."

The discussions growing out of the subject "What have I gotten out of this convention?" and the questions and suggestions from the "Question Box" (an innovation) were enlightening and entertaining. This meeting was followed by the post-convention Board meeting. Mrs. McGlothlan further manifesting her powers of friendly leadership.

In the afternoon there was the choice of a trip to "Longwood", estate of Mr. and Mrs. Pierre du Pont, a visit to Pennsylvania Museum of Art, or a visit to the College of Physicians.

Thursday night in the ball room of the Benjamin Franklin Hotel the President's Ball was held. In the receiving line were: Dr. and Mrs. E. Starr Judd and Dr. and Mrs. E. H. Cary.

Friday there was a trip to Atlantic City with the Atlantic City Auxiliary hostesses at the Claridge, and a tour of Wanamaker's with luncheon in the Crystal tea room.

It was a wonderful convention, one with a very full program, in which history, culture, science, procedure and pleasure united to form a perfect whole.

Respectfully submitted,  
Mrs F. W. Cregor.

Hudson County

Reported by Mrs. J. M. Murphy

The following report is a summary of the activities of the Woman's Auxiliary to the Hudson County Medical Society during 1929-1930 and 1930-1931:

Mrs. John Nevin accepted the gavel on which is written "Presented to the Woman's Auxiliary to the Hudson County Medical Society by its first President, Minnie U. Freile, October 18, 1929", and so became second President.

Mrs. Jaffin was appointed Chairman for the distribution of Hygeia. Miss Hetherington was appointed Chairman of Program and Publicity, which committee was later divided into 2, and as Miss Hetherington expected to be away for the winter, Mrs. Duckett was appointed Chairman of Publicity Committee and Mrs. Cosgrove of the Program Committee.

At the meeting on November 15, we were addressed by Miss Mabel L. Hannah, of the Field Department of the Welfare Division of the Metropoli-

tan Life Insurance Company, on "Adventuring for Health". Her topic gave a picture of the many sided attitudes of the large insurance companies on the extension of the span of life, by their interest in the public health work.

Following the usual custom of the organization, there was no meeting in December; in January a card party was held at which time \$160 was added to the funds, and a most enjoyable afternoon was spent by the members and their friends.

The February meeting was addressed by Dr. Levy, Director and Consultant of the State Department of Child Hygiene. He spoke on the newer trends of public health work and the desirability of the right attitude of doctors toward these changing trends.

At the March meeting \$100 was given to the following charities: Salvation Army Home and Hospital, \$25; Queen's Daughter's Day Nursery, \$25; Hebrew Home for the Aged, \$25; and the Goodwill Day Nursery, \$25. At the conclusion of the business meeting, cards were played.

The April meeting was one of our finest, 3 excellent speakers addressed us. Mrs. Hunter, State President, spoke on the aims and duties of the society; Dr. Margaret Sullivan Heberman gave a stirring talk on the right of freedom of the medical profession; our President gave a charming and dramatic review of Thornton Wilder's "Woman of Andros".

At the final meeting of the season, the Treasurer reported \$432.84 in the savings account and a membership of 76; \$25 was voted to the Red Cross, which has a deficit due to the extra calls made upon that organization. Delegates to the convention at Atlantic City were appointed: Mrs. Halligan, Mrs. Klaus and Mrs. Perlberg, with Mrs. Largay, Mrs. Perkel and Mrs. E. J. Connell as Alternates.

On October 17, 1930, date of our meetings was changed from the third to the fourth Friday. Invitations were sent to all eligibles to join the society. Mrs. Freile gave a report of the state meeting at Atlantic City, at which meeting our Auxiliary was honored by the election of our President as President of the Woman's Auxiliary to the Medical Society of New Jersey.

On November 21 the membership had increased to 93. Miss Hetherington was appointed Corresponding Secretary to complete Mrs. Binder's term, she having resigned due to sickness in the family. Miss Flack of the Department of Child Development of Teacher's College, Columbia, spoke on "Adult, Child Relationship".

The January Card Party was again a success; \$134.05 having been cleared, the balance now is \$993.78. The following charities were chosen to be assisted: St. Anne's Home for the Aged, Hebrew Orphans' Home, Red Cross Visiting Nurse Service, and the Helping Hand Society of North Hudson; \$25 being given to each.

Mrs. Taneyhill spoke at the February meeting on Mental Hygiene, giving a lively and instructive address; at the March meeting, we had Mr. Coleman, Secretary of the Jersey City Health Council, who spoke on "New Developments in the Field of Tuberculosis". Delegates to the state convention were appointed: Mrs. Klaus, Mrs. Duckett, and Mrs. Daly, with Mrs. Barishaw, Miss Hetherington and Mrs. Nicholson as Alternates. At the April meeting the membership was 110.

Members of the society attended the semi-annual state luncheon at Trenton, January 12, 1931, and the one in Newark in 1930.

Members and their guests enjoyed the Play

Day at the Arcola Golf Club, May 27, 1930, and a similar event planned for May 26, 1931.

At the May meeting \$25 was voted to the Red Cross. The nominating committee submitted its report as follows: President, Mrs. George M. Culver; First Vice-President, Mrs. Henry Klaus; Second Vice-President, Mrs. Warren J. Duckett; Recording Secretary, Mrs. Emmett J. Connell; Corresponding Secretary, Mrs. Louis L. Perkel. These officers were elected; the treasurer, Mrs. Harry Perlberg, continued in her office.

## County Society Reports

### ATLANTIC COUNTY

#### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The regular monthly meeting of the Atlantic City Hospital Staff was held August 28, in the Auditorium, the meeting being called to order by President Milton S. Ireland. The minutes of the previous meeting were accepted as read.

The scientific program was presented by Dr. Homer I. Silvers. Report of Service, 1931: This service has been a busy one, embracing varied types of illness, calling for care and close attention on the part of the intern on duty. It has been a pleasant one, and a profitable one, made so by the coöperation of those whose duties brought them in contact with this service. Our appreciation is expressed to the medical department, whose help and assistance have been invaluable and always cheerfully given; and to the operating room unit, whose patience I sometimes tried. It is the fortune of this service to take on new interns at a very busy season, and expect the new men to promptly take up the work and carry it on successfully. This year I am much indebted to Dr. Harris on the men's side, and to Dr. Tullock on the women's side, for assistance that has been most satisfactory; being efficient and well executed. Dr. Subin gave his time and skill in the administering of spinal anesthesia, and my regret is only that we did not use this form of anesthesia more often.

The service has been active, but at times it seemed to slow up, but as the better weather of summer approached, the annual crop of injuries, many of them terribly mutilating, made their appearance.

There were 270 patients admitted to the wards, and of this number there were 49 patients admitted with head injuries; 4 deaths occurred in this group. This year we have adhered to the conservative mode of treating cerebral injuries, and if we judge by the death rate, it was eminently satisfactory, but judging by that method is to my mind hardly a fair analysis, for that group of 49 takes in all grades of injuries to brain tissue, many of whom had only short periods of unconsciousness or other symptoms of brain contusion.

There were no operations for skull fracture or its complications. Reliance was placed entirely upon early spinal drainage, which was repeated often, and at times at short intervals. This method served us well, and while it entailed more spinal puncture, which under some circumstances was trying and difficult, it has justified itself in this service. However, the longer it is used, the



clearer will become our understanding of the work, and the certainty of the procedure be proved, or disproved.

Broken backs form a very distressing form of injury. The hopelessness of the lesion that has caused a complete paralysis only being matched by the individual, who is often keenly hopeful and cheerful.

We had 3 men admitted with fractured spines: 2 from diving in shallow water, and 1 as the result of an automobile accident; 2 were fractures in the upper dorsal region, and 1 in the lower cervical region; 1 was transferred to the private side, but all 3 died.

This year there were not a great many badly infected bone cases, or long-standing osteomyelitic conditions that taxed the patience of all concerned in their care. Two reasons for this are apparent: first, there were not so many badly compounded fractures admitted; secondly, there was a distinct attempt to see all fractures admitted, as early as possible, and for this I have to thank Dr. Irvin for his willingness to make all fracture cases an emergency, and to see them immediately. I am sure for this reason many compound fractures were converted into simple ones, and a destructive infection avoided that might have been disastrous to the patient.

Avertin was used as a routine anesthesia, except in those admitted for emergency operations, or those too ill to move to ascertain their weight. From the patients' point of view it is an ideal anesthetic; their going to sleep in their bed, not being aware of their removal from bed; with no shock or stress to the patient, as is so frequently the way we commonly handle our operative cases. With the patient brought to the operating room, placed upon the table, hands strapped down; the rattle of instruments; the hiss of the sterilizers; and watching the assistants work around, looking like members of the Kuklux, make it a wonder to me that people do not rebel. In contradistinction to this, under avertin your patient is placed upon the table, sleeping quietly, naturally, and is not disturbed by the work going on around him.

Avertin should not be looked upon as a complete anesthesia, but rather as a basal anesthetic to which must be added some other form, usually inhalation to complete the anesthesia. The patient sleeps for a considerable period after being returned to bed, and then usually awakens very much as one would from a long sleep, with no recollection of having left his bed.

Dr. Silvers emphasized the importance of preserving accurate and well taken histories of each individual who enters the hospital. Histories are taken for 2 main reasons: first to get a logical, concise sequence of events, secondly, with the progress noted, to form an accurate, lasting picture of the patient up to the time of discharge from the hospital. The quality and usefulness of these records would seem to rest solely with the members of the staff and the attending physicians, who at all times pay attention to the efforts exerted by the residents. He also urged more conscientious efforts in obtaining more necropsies and a more constant and persistent contact with the outpatient department.

Dr. John S. Irvin, Associate, presented statistics of the mortalities with a brief portrayal of each case.

Dr. Donald C. Tullock, resident physician, presented "The Stimulation of Wound Healing". From the very beginning of medicine, attempts have been made to help nature speed up her

efforts in the healing of wounds. Various chemicals have been used, different forms of bandages and dressings have been applied, and the effects of temperature have been investigated. In fact, apparently optimum conditions have been reached in many cases only to find that the sluggish tissues fail to respond in an adequate manner. Many chemicals have been advocated from time to time with claims which have been in some cases absurd. In others the chemicals have proved their value in selected cases only. There seems to be no substance which actively stimulates wound healing in cases selected at random. Many different procedures have been tried, such as vitamins, dyes, irradiation, and irradiated pastes and ointments, attempts at changing the acid base equilibrium of the body, divers other measures from the sublime to the ridiculous.

My purpose is not to review the entire subject but to briefly review some of the literature on one of the newer chemicals which appears to have merits not possessed by some of the older substances.

Personally, I have no claims for this chemical, having had little or no practical experience with it. It may seem peculiar then, that I pick this particular topic. The reason is twofold. First, it cannot be denied that slowly healing wounds increase the number of hospital days, hence they are of economic importance. The second reason is that the application of this chemical is based on sound and logical reasoning which at least removes it from the trial and error class in which so many of the wound stimulants fall.

The original article was published by Dr. L. P. Reiman, of Philadelphia, in May 1930. Realizing the inadequacy of wound stimulants, he, with some co-workers, decided that there must be a difference in chemical composition between normal cells and the devitalized and sluggish tissues of wounds that fail to heal. Chemical analysis revealed the fact that there was a quantitative difference in the sulphur on this radicle. This applied only to the sulphur organic combination. He immediately set about to find ways and means to supply sulphur to the deficient cells. Many substances containing sulphur or inorganic compounds were tried without results. Next came a combination of the sulphur radicle and glucose. In this case the glucose merely acted as a bacterial medium and the cure was worse than the disease. He next decided to continue the sulphur with some form of antiseptic. To this end various chemicals were compounded until he finally found one which he believed filled the specifications. This was cresol with the sulphur radicle inserted in the para position of the benzene rings—chemically, para-thio-cresol. This substance, then, in theory at least, was ideal. The sulphur would supply the deficient chemical while the cresol would inhibit bacterial growth. The first experimental work was done on animals with results which corroborated exceedingly well the original theory. Naturally, the next step was to try this new substance on humans. Several cases of old wounds were used for the most part with good results. There is no need to cite all of the cases treated. I am, however, including a typical case so treated verbatim:

Mrs. C., aged 30 yr., was injured 21 yr. ago by a heavy weight falling on the outer side of the left foot. A bruise resulted, and from the history large vessels were probably severely injured. The part remained tender and sensitive. An ulcer appeared 14 yr. ago which healed several times after rest, skin grafting and other

procedures, but only for short periods of time. On examination in May 1930, an ulcer, several years old, 5x6 cm. and .05 cm. deep, presented a fairly clean dull brown red base and hardened, slightly inverted edges. The skin surrounding was pigmented light brown, slightly edematous, poorly vascular. Treatment with 1:10,000 solution of this cresol resulted in complete healing in 3 weeks. The epithelium covering the old denuded area was thin and delicate. The patient was anxious lest a slight trauma again break the surface. One quarter of 1% thio-cresol in lanalin was rubbed in 3 times a week. In 3 weeks the new skin was thicker to the touch than the normal skin of the foot, though feeling movable over the underlying fascia. Its color and reaction to momentary pressure showed good vascularization.

This case, and similarly others seem to show that para-thio-cresol does stimulate all proliferation to a marked degree. This seems to apply also to epithelium. Further experiments are being carried on by the same workers and their results are to be published in due time.

The method of application is far from complicated. A 1:10,000 solution is made up as follows: The chemical is just dissolved in a small amount of 95% alcohol because of its limited solubility in water. For a liter of solution—1 gm. of thio-cresol is dissolved in about 40-50 c.c. of alcohol. This is then made up to a liter with water (preferably distilled). This solution is used as a continuous wet dressing for 48 hr. at the end of which time it is discontinued for the next 24-48 hr. The reason for the discontinuance is that the newly formed cells are to be allowed a chance to increase to a size approaching normal. After this interval the wet dressing is again instituted. Once the then delicate epithelium has grown over the wound it may be stimulated to increased activity by the use of a lanalin ointment of ¼% para-thio-cresol. Later work seems to favor a less concentrated ointment such as .1%, for reasons to be mentioned later.

There are some disadvantages to the use of this preparation. The solution should be freshly prepared, but due to the dose of preparation this is a practically negligible factor.

Its greatest disadvantage lies in its odor, which is that characteristic of any organic sulphur compound. While this is disagreeable it may be obviated somewhat by the use of aromatics. It is claimed that the patient becomes accustomed to the odor to some extent. The third disadvantage is that some patients appear to be susceptible to the solution—developing blebs and pustules about the wound. This is true only of a small percentage of cases. In such an event weaker solutions can be used or treatment can be readily discontinued with no harm done.

This work has been carried on in a recognized institute by competent workers. The theory of its application is sound. For these reasons, at least, the chemical merits a trial to this end. The preparation was ordered by the hospital pharmacy and arrived about the time the services changed. For this reason I can offer no clinical data as to its usefulness.

I offer this brief review of the subject merely for what it may be worth. Possibly it may turn out to be just another so-called stimulant to wound healing. On the other hand the chemical may actually be of value. However, I do feel that due to the sound theoretic consideration involved, it is worth at least passing mention, if not complete clinical investigation.

Dr. William G. Harris gave a report on "Fractures of Cervical Spine". Due to the great increase in the number of automobile accidents, the incidence of fractures of the spine has increased and for this same reason at the same time there has been a proportionate increase among women. While this statement may hold true as a general rule, yet, in 3 cases of fractures of the cervical spine seen in the men's surgical ward during July, only 1 was due to an automobile accident, while the other 2 were due to diving in shallow water.

The most frequent case of fracture of the cervical spine is indirect evidence due to a fall upon the head, feet or buttocks, the force of the fall causing a hyperflexion or hyperextension of the spine.

As is well realized, the danger of spinal fractures is due to cord injury which varies greatly in each individual case, the said injury being in no way entirely dependent upon bone damage, and that the evidence of cord injury may change hour by hour.

The 3 cases seen during July all showed rather typical signs of fracture with definite history of injury. Two of these showed fractures of the cervical vertebra with corresponding cord damage while in the other no fracture was demonstrated by x-rays, although, clinically, there was injury to cervical or upper thoracic cord.

Clinically, spine fractures are diagnosed by history of injury, paralysis of muscles, loss of sensation, exaggerated or loss of reflexes. It is said that all cases of spine fractures with cord injury show some abdominal symptoms as distention and constipation. Bladder symptoms also vary in their intensity but it is said that they are seen less often than distention of the abdomen. Priapism is another important finding which should not be overlooked and, when present, denotes severe cord damage, suggesting a serious outcome.

The cases which we saw all showed paralysis of muscles, in 1 only the right side of the body being involved while the other 2 showed complete paralysis below the upper extremities with weakness of the upper extremities and a loss of sensation below the second rib and along the ulnar side of the arms and the forearms. All showed early abdominal distention and inability to void. Priapism was noted only in 1 case and then only at time of admittance.

Where there is complete paralysis, it is doubtful whether the patient is benefited by treatment at all. In all cases 2 methods of attempting reductions are available: one by gradual extension, and the other by attempt to reduce the dislocation under anesthesia; the latter being by far the most dangerous.

In 2 of our cases, we used gradual extension by means of the jury mask, and, so far as results were obtained in preventing further damage to the cord, the results were as good as could be wished for, although 1 of these individuals lived only 4 hr. after his injury. On the other individual in whom no bone changes were demonstrated, immobilization was effected on an air mattress between sandbags. In all patients it was necessary that they be catheterized and abdominal distention relieved by enemas. We also attempted in these cases, as in head injuries, to prevent edema of injured cord by the restriction of the intake of fluids.

Operative treatment of these fractures has fallen into disrepute, except in those cases where spicules of bone are pressing upon the cord or where there are signs and symptoms of cord



pressure either due to hemorrhage or edema about the cord without evidence of cord injury.

The cause of death in these patients is often puzzling. Injury to the vital centers in the medulla will cause instantaneous death. One of our patients appeared to be progressing nicely although he had developed an apptitis and suddenly, or, rather, within 12 hr. was moribund.

The 3 patients seen all showed evidence of severe cord damage and none recovered. Yet, with a larger number of patients, and with the treatment we used, we would get recoveries, for the mortality of all spine fractures is quoted as above 50%.

### BERGEN COUNTY

Charles H. Littwin, M.D., Reporter

There was a special meeting of the Bergen County Medical Society on August 12, 1931, at the Bergen County Isolation Hospital for the purpose of discussing the present status of poliomyelitis. Dr. Morrow presided and there were about 50 men present. The speaker of the evening was Dr. Scheffer, Assistant Deputy Superintendent of the Willard Parker Hospital, New York City.

The following is an abstract of his address:

*The present status of poliomyelitis.* The present outbreak of poliomyelitis is the second largest in history; the severest outbreak being that of 1916, when there were in New York City alone 9000 cases, with a mortality of 26.6%. In the present outbreak, the mortality is only 12.6%, which is considered quite low.

This dreaded disease is still shrouded in much mystery. Research work is constantly being done, especially during the epidemic, by men devoting their entire time to the study of poliomyelitis.

*Etiology of poliomyelitis.* Nothing very definite is known about the causative factor of poliomyelitis. One should always remember the carrier. Healthy carriers are the most prolific. The fly is commonly suspected as a carrier, and it is possible that it carries the polio germ. Infected milk is also suspected but these cannot be proved.

*History of poliomyelitis.* Poliomyelitis is a relatively new disease in the history of medicine. In 1840, Heine, of Germany, drew a good description of the disease. However, his observations were limited mainly to the paralytic stage, and his chief contribution was in separating the paralytic from the pre-paralytic stage.

In 1890, Meden published his study of the disease in Sweden, and described the outbreak of poliomyelitis prior to 1890.

By 1909 there was a more thorough research, and also an experimental approach to the disease. It was possible to get an idea of the virus and its character, and methods were discovered to study the disease experimentally. Thus, Gandsteiner and Poff discovered that the disease was transmissible to monkeys which are an excellent experimental medium.

Flexner and Lewis made further studies with respect to immunity in animals recovered from the disease. Also it was found that individuals who have had the disease have in their blood substances, such as antibodies, which neutralize the virus of poliomyelitis. An emulsion of virus and serum introduced cerebrally in a monkey fails to produce the disease. The virus alone does produce the disease. Most adults contain in their blood anti-virus which renders them relatively immune.

Attempts to immunize sheep and horses against the virus to produce anti-virus have been made. In 1917 Banzalip and Neustader succeeded in immunizing the horse against poliomyelitis and in

producing in the horse's blood anti-virus material. This horse serum is now used experimentally in New York City but is not available for general use and its value has not yet been proved.

Polio-cord virus from monkeys has been successfully used by Pettitt and Levatidi in the treatment of poliomyelitis. Weyer, Banzalip and Park at the Willard Parker Hospital have produced a very potent anti-virus which is a most valuable clinical adjunct in the treatment of the disease.

*Clinical aspects of poliomyelitis.* During previous epidemics much confusion existed as to the character of the symptoms and their proper classification, as manifested in the various stages of the disease.

This confusion and uncertainty, which still exist to some degree at present, arose out of the fact that, at the beginning, the symptoms are so slight and generalized that almost any of a great number of other diseases display the same phenomena. Thus we have an onset which lasts from 1 or 2 days to a week. It is characterized by general malaise, headache, nausea or vomiting, gastro-intestinal upset, perhaps a slight fever, pain in the back or limbs, and moderate rise of pulse. At this stage the disease may suddenly become arrested. For this reason some authorities have called it the abortive type of poliomyelitis. The spinal fluid in these cases is practically negative, showing no globulin and a few cells, not exceeding the high normal of 7 or 8. The patients improve rapidly in a day or two.

In other cases, the symptoms described above become more severe, and, in addition, there usually is present pain and rigidity of the neck, a little higher fever, and more rapid pulse. The Kernig sign is positive, and there are evidences of a meningeal character, when the patient in a sitting posture makes any forward movement from the hips. The head may be moved on the neck, but not the neck on the shoulders. These symptoms are invariably present, and they are accompanied by an increase of tenderness in the reflexes in all extremities. Thus, we have the pre-paralytic stage. The spinal fluid here will be found to contain a cell count of 50 to 200, polymorphonuclear cells predominating; globulin is also present to a more or less degree.

If the case progresses, there will be a diminution of the reflexes with general hyperesthesia; the child is fretful and irritable, temperature is 102°, pulse is rapid, there will be general prostration, and finally the reflexes will disappear, and paralysis will ensue. This paralysis may involve 1 or 2 muscles, or groups of muscles, thus affecting entire limbs. Thus, the paralytic stage has ushered in, and the spinal fluid here has a ground-glass appearance, contains globulin and a cell count of from 200 to 600 cells. The onset from the pre-paralytic to the paralytic stage may be rapid; often in only a few hours there may be extensive paralysis of whole groups of muscles. Usually, however, it is 4 to 6 days. The incubation period lasts from 4 to 9 days.

*The treatment of poliomyelitis.* The treatment of acute poliomyelitis at present is almost entirely by means of convalescent patients' serum. The value of this treatment is difficult to estimate, because there is no sharp line of demarcation clinically between the different stages of the disease. However, from extensive observations, it has been found that the serum will be most effective in the pre-paralytic stage. Once paralysis has set in, it has been found that the serum is of little value. Intramuscular injections, usually in the buttocks, is the method of choice. Formerly intraspinal and intranervous injections were given, but these cases were attended by severe anaphylactic shock. With-

out displaying any superior results. The dosage of the intramuscular injections of serum varies according to the severity of the case, generally 30 c.c. for infants, up to 80 or 100 c.c. for adults.

Aycock and Luther made very accurate observations on the therapeutic value of treatment with serum. Of 106 cases, 65% developed paralysis; 35% escaped. This is similar to the observations made by Ivan Whitman in 1905, who studied the outbreak in Sweden: 40% to 60 of prodromal cases failed to develop paralysis. In those pre-paralytic cases where the treatment by serum does not check the oncoming of paralysis, it has been found, nevertheless, that the extent and degree of paralysis were lessened. This is proved by observations in other institutions where control cases, that is untreated cases, show greater involvement and severity of paralysis.

As to treatment by horse serum, it has been shown that its value is doubtful. In addition, the risk of its administration is too great, especially if given intravenously or intraspinally, as it gives rise to excessively severe reactions (anaphylaxis).

In the bulbar types of the paralytic stage, there is a great degree of vascular engorgement and hyperemia of the medulla. This produces edema and consequent great pressure upon the structures of the brain. These cases are not amenable to serum treatment. But it has been found that intraspinal injections of ephedrin in 60 mg. doses at 8 to 12 hour intervals will tend to relieve the pressure by diminishing the edema. But here again, we cannot be too optimistic because many of these cases, especially the severe ones, will not respond to ephedrin.

The Drinker respirator is in use at the larger institutions, such as the Willard Parker, in intercostal and phrenic types of poliomyelitis. But it has only limited value, and the bulbar type is not benefited. In general, we may say that the treatment of paralytic cases, even at an early stage of the paralysis, is futile because extensive damage has already been done to the central nervous system by the time paralysis makes its first appearance.

Paralytic and post-paralytic cases are treated simply by orthopedic measures. Orthopedic treatment, however, is not instituted until 6 or 8 or more weeks after the beginning of the onset.

#### SUMMARY

(1) Acute anterior poliomyelitis is a disease that is still very baffling, since nothing very definite is known, especially as regards the etiology and the treatment.

(2) Most normal human adults are immune; children are not immune.

(3) The treatment is almost exclusively limited to convalescent patients' serum. Horse serum has proved to be unsatisfactory and unsafe, as it gives rise to severe reactions. Post-paralytic cases are treated by orthopedic means 6-8 weeks or more after the onset.

(4) The serum is of value only in the pre-paralytic cases. Once paralysis has set in, serum is of little or no value.

(5) Those who have had the disease are immune to any further attack, as they have developed in their blood certain substances, called antibodies, which neutralize the virus of poliomyelitis.

#### BURLINGTON COUNTY

Roscius I. Downs, M.D., Reporter

The regular meeting of the Burlington County Medical Society was held in the Community House, Moorestown, New Jersey, on September 9. President Kuder called the meeting to order at

1.30 p. m., with 26 members and guests present. The guests included, Drs. Henry H. Lott, of Philadelphia, and Henry B. Diverty, of Woodbury. The minutes of the previous meeting were read and approved.

Dr. Newcomb invited the society to hold a clinic for its members once a month at "Fairview", the tuberculosis sanatorium. This invitation was accepted and the second Friday of each month selected.

Dr. Kuder outlined his views on "Public Relations" and "Medical Publicity in Burlington County". He spoke as follows: The consensus of opinion is that some sort of publicity should be applied, by which the public will be made to understand the nature, purpose and results of efforts made by scientific medicine in the prevention, control and cure of disease.

Several life insurance companies, one in particular, actuated presumably by broad-visioned business motives, are rendering services of signal value along the lines of preventive medicine. The extent of popular medical education, though it has only begun to grow into what it is bound to become, is steadily broadening.

People like to be told about their health and like to know how to keep healthy, unwilling as they may be to observe the rules of health and hygiene laid down for them.

It is unfortunate that we, as medical men, who are the logical preceptors in such matters, teach the public so little about the fundamentals of our science. Few of us have that particular gift of separating simple essentials from intricate surroundings. So far as medicine is concerned, many of us have forgotten our mother tongue and speak only of the precise but formidable dialect of our professional tribe. Even when we are able to overcome these handicaps, some doctors under that wet blanket of ethics tear hair and gnash teeth at suggested publicity on the part of medical societies claiming it will result in personal advertising by individual physicians. The public should receive medical information from physicians rather than from charlatans or quacks.

A Committee of Public Relations has been formed. Its present purpose is to plan and present free public lectures by members of the county society to the public. The campaign will depend upon willingness of the members to back this movement, and the creation of proper local sentiment to receive these lectures. Different members of the society will prepare lectures on the several common medical subjects. There will be 2 speeches on each subject. The date, hour and subject will be arranged under the auspices of the Burlington County Medical Society with the name of the speaker withheld. The committee is composed of the County Society President and Secretary, Drs. Reisinger, Emlen Stokes, Hunter, Remer and Newcomb.

The scientific program followed: "Some Practical Hints for the General Practitioner to Improve His Treatment of Eye and Ear Patients", by Dr. Daniel F. Remer, of Mount Holly, and "Acute Sinus Infections Dealt With By The General Practitioner", by Dr. Henry H. Lott, of Philadelphia.

Dr. Remer's paper was so practical and apropos for the family doctor that it will be forwarded to the Journal for publication.

Dr. Lott said that acute sinus infections need not go to a specialist. Fifty per cent of the patients will be aborted by shrinking the mucous membrane of the nose, applying local ice for the



first 24 hr. and opening the bowels. In 5-7 days, 75% of the cases will clear up. The following H. C. solution was given to shrink the nasal mucous membrane and to open nasal drainage; cocain gr. 2, menthal gr. 2, camphor gr. 2, oil of rose m. 2, liquid alboline oz. 1.

In acute antrum cases, posterior drainage 3 times a day is a benefit. This position is present when shoes are placed under a bed. In 5-7 days, if no relief is present use vaccine. Dr. Lott uses Sherman's number 36 with wonderful results. It is probably due to the Friedländer bacillus in the vaccine. Twenty-four to forty-eight hours after the first dose, one half of the cases will open up.

To recapitulate: Do not send every sinus case to a specialist. Try first purgation astringents to nasal mucous membrane, posterior drainage, and vaccines.

### GLOUCESTER COUNTY

Henry B. Diverty, M.D., Reporter

The annual social session of the Gloucester County Medical Society was held September 17, at the Hotel Pitman. It proved to be a very enjoyable affair.

A dinner was served to the physicians, their wives and guests. Music was provided by Leslie Sellen and 2 fellow musicians, while the Adelphia Quartette, of Philadelphia, offered a number of selections which were very much appreciated.

Dr. Wilmer Krusen, of Philadelphia, the guest speaker, gave a splendid talk. Later dancing and cards were enjoyed.

Those present were: Dr. and Mrs. Duncan Campbell, Dr. and Mrs. J. Harris Underwood, their daughter, Dorothy, and her guest; Dr. and Mrs. E. E. Downs, Mrs. Paul Pegau and Dr. and Mrs. H. B. Diverty, all of Woodbury; Dr. and Mrs. Chester I. Ulmer, of Gibbstown; Dr. and Mrs. S. A. Ashcraft, of Mullica Hill; Dr. and Mrs. C. F. Fidler, of Clayton; Dr. and Mrs. H. Wilson Stout, of Wenonah; Dr. and Mrs. I. W. Knight, of Pitman; Dr. and Mrs. R. K. Hollinshed, of Westville.

The guests were: Dr. and Mrs. Don Weems, of Wenonah; Dr. and Mrs. Summerill, of Pennsgrove; Dr. Emma Richardson, of Camden; Mrs. George E. Reading, widow of the late Dr. Reading, of Woodbury; Dr. and Mrs. Church, of Salem; Dr. and Mrs. Miller, of Millville; Dr. and Mrs. Fuller Sherman, Dr. and Mrs. Oram Kline and Dr. and Mrs. Ralph Moore, all of Woodbury.

### MORRIS COUNTY

Marcus A. Curry, M.D., Reporter

The annual meeting of the Morris County Medical Society was held in the recreation hall of the Cafeteria Building at the State Hospital at Grey-stone Park, on the evening of September 30.

President Sutphen was privileged to preside over an exceptionally well attended meeting of approximately 70 members and guests; among the latter being President Hagerty and Secretary Morrison of the State Society; Councilor Beling and Dr. Pinneo, of Newark; Clinical Director T. B. Neil and Staff Members, David Gardner, Ernest Hirschhoff and Richard L. Eltinge, of the United States Veteran's Hospital at Lyons, New Jersey; also Dr. Henry O. Carhart, of Blairstown, New Jersey.

The scientific chapter of the meeting was given the right of way and the speaker of the evening, Dr. George Draper, of New York City, Associate Professor of Medicine at College of Physicians and

Surgeons, and Attending at the Presbyterian Hospital, was introduced by the President to tell about "Poliomyelitis".

Dr. Draper prefaced a very interesting discussion of this present day problem by saying that he did not know whether the President was correct in saying that he would "tell about poliomyelitis"; that it is a very perplexing malady that has been under study in this country for a good many years, both clinically and laboratorally; that a striking feature of the problem is that the things being said about it now were said back in 1916; that this situation is very discouraging but there are 2 or 3 points that seem to be worth-while bringing up to be discussed to bring out some points of view that might add to our knowledge; that, of course, one thing is getting clearer, and that is poliomyelitis is *not* essentially a paralytic disease; the fact is that the cases that are paralyzed are so tragic and gripping in their appearance that they have taken a grip on the physicians and this has retarded progress in a knowledge of the disease, because we have dwelt on that; so if we could think of it as a general systemic disease we might be able to get a new point of view; and stressing the point that so long as the virus remains in the blood stream nothing happens, but when it enters the cerebral spinal tissue, then we are running into danger; that he did not think anyone knew the answer and there never was such an opportunity for clinical observation as this disease presents; citing a very low percentage that developed muscular weakness and that more than half recover complete power within a reasonable period of time; that this gives quite a different feeling about paralytic cases; that the small percentage who develop muscular weakness brings up the significance of these paralyzed individuals and asking why it is that 10% or 15% or perhaps 17% develop paralysis while the others do not; also explaining a very interesting study he has been making recently of the type of child that apparently is susceptible to the disease; that the disease seems to attack the large, well-nourished, overgrown and oversized children who generally run large for their age; also citing several children in the same family where one will have the disease and the others will not, and other family groups where 3 or 4 will have the same early symptoms and only one will develop muscular weakness, and this one will be of a different type from the other siblings; pointing out the difficulty of a quarantine as the milder cases are running at large and also pointing to the more probable lower percentage of paralysis if it were possible to figure on the basis of the known cases combined with those that pass unnoticed; that the disease requires everybody's attention to work out the problem; and stressing the importance of immediate diagnosis.

Dr. Draper's discussion was illustrated by lantern slides of patients and charts, and evoked rather extensive discussion which was taken part in by Drs. Hagerty, McMurtrie, Haven, Krauss, Young, Rubin, Larson, Emory, Morrison and others.

At the conclusion, Dr. Draper was given a rising vote of thanks.

The business chapter of the meeting was taken up and it included the reading and approval of the proceedings of the June meeting and the report of the activities of the Executive Committee. The Treasurer's report gave the balance on hand at the beginning of the year, the receipts and disbursements during the year, and showed a balance of \$1219.32; of the membership of 83 there was only one delinquent. With only about \$400 left after

payment of the dues to the State Society, the question was raised about continuing the library which is maintained at the Morristown Public Library. This was discussed and Dr. Larson stressed the value of this as years roll on, and an action was taken that the current library now being accumulated be continued for the next 10 years.

Dr. Charles Dykeman, of Morristown, and Dr. Harold S. Hatch, Superintendent of the Morris County Tuberculosis Sanitarium, were proposed for membership and referred to the Credentials Committee. Dr. Attilio Galasso, of Morris Plains, who was proposed at the June meeting, was unanimously elected. Officers for the new year as recommended by the Nominating Committee were unanimously elected as follows:

President, Fletcher I. Krauss; Vice-President, Frank N. Pinckney; Treasurer, George J. Young; Secretary, Albert J. Ward; Reporter, Marcus A. Curry; Historian, Henry W. Kice. For councilor members of the Executive Committee: Drs. Sutphen, Frost and McElroy; for members of the House of Delegates of the State Society for 3 years, Drs. Teskey and Teller; Alternates: Drs. Gilbertson and Truax; for member to represent the society on the Nominating Committee of the State Society, Dr. Costello.

After the meeting, by invitation of Superintendent Curry of the State Hospital, the members and guests enjoyed refreshments in the cafeteria.

### PASSAIC COUNTY

Wayne W. Hall, M.D., Secretary

The regular meeting of the Passaic County Medical Society was held at the Health Center, Paterson, September 4, with Dr. Carlisle presiding. There were 35 members present. The minutes of the May meeting were approved as read.

Dr. David Polowe, of Paterson, presented a case of Banti's Disease, treated by splenectomy.

Dr. Murray H. Bass, Associate Pediatrician, Mt. Sinai Hospital, New York City, presented a paper on "Serum Therapy". It covered practical considerations of its value and its dangers in treatment of diseases of children.

This paper stimulated considerable discussion, due to the prevalence of the infantile paralysis epidemic. The use of convalescent serum was described in detail. The discussion was participated in by Drs. Donald Low, S. A. Levinsohn, L. G. Shapiro, J. Pillar, and G. M. Levitas.

Dr. Carlisle appointed a Nominating Committee for the election of officers for the coming year. This committee consists of Drs. J. P. Morrill, Paterson, Chairman; O. R. Hagen, Paterson; and J. N. Ryan, Passaic.

## Obituaries

GARRISON, Biddle H., M.D., Chief of Staff of the Ann May Memorial Hospital at Spring Lake since its inception, and a leading North Jersey surgeon, died August 29, 1931, at his Vista Place home on the Shrewsbury River, Red Bank, of hardening of the arteries, after a lingering illness. He was 54 years old.

Dr. Garrison had undergone treatment at the Union Memorial Hospital at Baltimore, and had spent part of the winter in Nassau, Florida and North Carolina. He had been home for the past 9 weeks, and had been in a serious condition.

Dr. Garrison was a Fellow of the American College of Surgeons, and had been active in the practice of medicine since 1900, a period of 31

years, first settling at Long Branch after serving as an intern at the National Homeopathic Hospital at Washington, D. C. He was born at Elmer, Salem County, February 17, 1877, attended the Elmer High School and was graduated from the New Jersey Academy in 1894 and the Hahnemann Medical College, Philadelphia, May 12, 1898.

In 1901, after practicing in Long Branch for 15 months, Dr. Garrison moved to Red Bank, acquiring the practice of the late Dr. John Calvin Rush, who moved to Eatontown. He had since been an active practitioner, being Chief of Staff of the Spring Lake Hospital since 1906. Dr. Garrison was the senior surgeon at the Ann May Hospital and for many years a member of the Monmouth Memorial Hospital Staff at Long Branch, and at the time of his death was a consulting surgeon. He was a visiting surgeon of the Riverview Hospital, Red Bank; consulting surgeon at the Monmouth County Tubercular Hospital at Allenwood; a member of the American Institute of Homeopathy, American Medical Association, New Jersey Homeopathic Medical Society, Medical Society of New Jersey, a past president of the Monmouth County Medical Society and a past president of the old Monmouth County Homeopathic Society; New York Academy of Pathological Science and New York Surgical and Gynecological Society, and New Jersey Hospital Association.

TAGGART, Thomas Dartnell, of 25 South Indiana Avenue, Atlantic City, died in St. Louis, Missouri, on September 23, 1931, as the result of an operation.

Dr. Taggart, who had been connected with the Atlantic City Hospital for 25 years, being chief of the surgical staff when death came, was taken ill in March. Pneumonia and a heart condition were successfully resisted, and he left the hospital in June. But another complication developed, and he went to St. Louis for an operation at the hands of one of the foremost specialists of the country. It proved successful, and the surgeon was anticipating an early return home when fatal conditions set in and it was impossible to save him.

At the time he passed on, Dr. Taggart's son, Ludwig, was with him. The family, headed by Thomas D. Taggart, Jr., member of the county bar, started westward, but failed to reach St. Louis in time. The survivors include Mrs. Taggart and Mrs. Russell Kleinginni besides the 2 sons.

Dr. Taggart was born in Shenandoah, Pa., in 1870, his parents being Thomas and Phoebe Taggart. After graduating from high school, he entered Jefferson Medical College, Philadelphia, from which he graduated in 1896. Subsequently, he served in the hospital connected with that institution, and in the surgical ward of the Philadelphia General Hospital. While in that city he married Miss Anna Drusilla Watson.

In 1906, Dr. Taggart went to the shore resort to practice and had remained there ever since. He became interested early in the development of the Atlantic City Hospital. Besides his surgical practice he found time for civic activities, joining the Elks, the Masons, and serving as a lieutenant of the City Troop of Cavalry, a private military company which was organized several years ago, but has been disbanded. He was also a member of the Atlantic County Medical Society.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 11 ORANGE, N. J., NOVEMBER, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## SURGICAL ASPECTS OF BILIARY TRACT DISEASE\*

JOHN B. DEEVER, M.D.,  
Philadelphia, Pa.

In these days, when the medical world is so prevention-minded, it is eminently fitting to stress the surgical aspects of biliary tract infection, inasmuch as early recognition of the indications for operation means easier surgery, lower mortality and, finally, the prevention of morbidity.

The point of whatever contention exists between surgical and medical minds obviously centers about the indications for surgery. At the same time, I dare say, that nowhere is coöperation between physician and surgeon more important for the patient's welfare. This applies particularly to chronic diseases of the biliary tract, for opinions seem to agree, at least in this country, that the earliest acute manifestations of disease of this region are best treated medically. It is interesting to note, however, that abroad, and particularly in Germany, many careful observers are opposed to the interval operation for acute cholecystitis, for example, basing their argument on the fact that the best end-results are obtained from surgery in the acute stage, when the process is localized. Furthermore, they contend that waiting for a quiescent period gives the infection time to spread to contiguous structures, especially the common duct, pan-

creas and liver, thus giving rise to the residual manifestations that cloud the results of surgical treatment in chronic cases. These residual effects are so frequently discussed at meetings of this kind, and we have so often been a party to the discussion, that we would hesitate again to intrude them upon your attention, were it not that your having suggested the title of this paper encourages us to believe that you are aware of the importance of, and are as much interested in the subject as we are.

What are the surgical aspects of infection of the biliary tract? Their beginning is usually in the gall-bladder, since among the most important and persistent vital effects of chronic disease of the gall-bladder are hepatitis, cholangitis, pancreatitis, and last, but not least, common duct involvement. If we are to fall in line with preventive work it should be our endeavor to avoid these serious sequels.

It is a matter of common knowledge that practically all cases of cholecystitis have an associated hepatitis. No less familiar is the fact that gall-bladder infection may be carried from and to the liver through the portal or the lymphatic route. In fact, from the afferent route the liver may become involved from any abdominal focus—appendix, peptic ulcer, or colon, which may in turn involve the gall-bladder; while, as a rule, from the gall-bladder to the liver, infection is carried by way of the lymphatics. The question as to whether the primary infection resides in the gall-bladder or in the liver has not as yet been definitely determined. There seems to be as much evidence in favor of the one as of the other

\* (Read in Asbury Park, N. J., June 4, 1931, at the 165th Annual Meeting of the Medical Society of New Jersey.)

route. Taking it for granted, therefore, that in a certain percentage of cases the liver has become infected through the gall-bladder, it seems logical to assume that with removal of the gall-bladder the hepatitis will subside, and, if so, removal of the gall-bladder will be effective in preventing further damage to the liver. The vital point in this connection is the difficulty of recognizing the presence of an associated hepatitis in disease of the gall-bladder. For the present, we cannot do so with any degree of certainty. This may change when the busy research workers provide us with as reliable a test for early disturbance of liver function as cholecystography is for disturbed gall-bladder function. While the icterus index and the Van den Berg tests are indispensable for detecting latent jaundice, we must remember that (except when the common duct is involved) not all cases of hepatitis are jaundiced, so, the hepatic disease may progress unrecognized until exposed by surgery. Even when it is suspected clinically by the common signs of hepatic insufficiency, such as lassitude, so-called bilious attacks, etc., it is doubtful whether it can be effectively cured by non-surgical means, such as drainage, cholagogues and the like. That, at least, is our experience, based on the number of cases of gall-bladder disease that eventually are brought for operation.

In its early stage, the stage of metabolic disturbance, disease of the gall-bladder does not extend beyond the mucosa of the organ, so that the cystic duct remains unaffected. While in this stage, medical drainage should be promising, especially when accompanied by the proper regimen of rest and diet directed toward altering the blood chemistry. There are 2 points to be considered in this connection: First, the gall-bladder may have become infected through the liver, and thus the hepatic disease may be already too advanced to benefit by medical drainage. Secondly, catarrhal cholecystitis is comparatively uncommon, since in most instances the disease resides in the walls of the gall-bladder, and it is only by removing this interstitial infection that the ravages of infection can be checked, the chief of which are choledochitis, hepatitis, chol-

angeitis, pancreatitis, and occasionally hepatic abscess, or cardiac and renal derangement.

Among the serious possibilities of gall-bladder disease, cholangitis assumes importance because of its tenacious chronicity, a tenacity which is explained by the fact that the lesion of cholangitis resides deep in the wall of the bile ducts. The symptoms of cholangitis are those of infection plus certain features related to hepatic function. The mild case presents fever, malaise, anorexia, jaundice at times, and usually an appreciable enlargement of the liver. The same train of symptoms, in fact, as is seen in catarrhal jaundice, stone in common duct, and hepatitis, so that differentiation is not always possible. Indications for operation depend upon the surgeon's experience in estimating the patient's condition, and the degree of disability suffered by the patient. Some mild case of cholangitis may subside spontaneously. A similar acute judgment is required in the more severe cases which are characterized by septic temperature, deep jaundice, profuse sweats, anorexia, nausea, vomiting and marked enlargement of the liver. In these, the margin of safe surgery is easily overstepped. The physician acts best who seeks a surgical opinion early in the early case. The infection being interstitial, it can be cured only by continuous, prolonged drainage, such as can be obtained only by means of a T-tube in the common duct. The logic of the treatment is the same as applies to localized infection elsewhere in the body by the relief of tension and drainage, but with this difference, that such localized infections are usually acute conditions, whereas most of the lesions of the biliary tract are a chronic, low-grade and well-established infection which has led to more or less functional derangement. Simple drainage of the gall-bladder will not suffice for a cure in these cases. The gall-bladder must be removed because the potential power for future trouble lies in the infection retained within its walls. So, removal of the gall-bladder and T-tube drainage of the common duct will be required, according to presenting conditions. This applies likewise to common duct involvement and to pancreatitis. We



very rarely use biliary drainage by cholecystogastrostomy or cholecystoduodenostomy, not only because we consider external drainage more effective, but also because the stoma of either type of anastomosis does not remain patent for any length of time if the common duct is not permanently obstructed. Furthermore, the presence of the anastomotic opening may actually favor an ascending infection from the stomach or duodenum into the gall-bladder and the upper biliary tract.

The import of involvement of the common duct cannot be overestimated in considering the surgical aspects of infection of the bile passages. Inflammation, as well as stone in the duct, is generally the result of an antecedent cholecystitis. The presence of stone causes a varying degree of biliary obstruction which in turn increases the inflammatory reaction and may ultimately result in stricture, ulceration, etc. The effects of common duct involvement are not only local but general, due to the direct influence it exerts on the hepatic duct, through lymphatic absorption, and on the function of the gastro-intestinal tract and the pancreas. Stone in the common duct is particularly serious because its possible effect on the hepatic duct may lead to cholangitis or hepatic abscess as a result. Operation in such instances is done as a last resort and usually ends fatally. The surgery of the common duct is so delicate and difficult that it behooves the prevention-minded practitioner to do all in his power to avoid this possibility in the treatment of his gall-bladder patients.

No doubt many of you are making up your minds to ask the question—when does a gall-bladder condition become surgical? Let me forestall this question. As already indicated, early acute cholecystitis, except of course in the presence of symptoms of perforation, gangrene or malignancy, should be treated conservatively, at least until the acute stage has subsided. It is to the chronic cases that the question is particularly applicable. As an offhand answer, we would say that a chronic case becomes surgical when, after a reasonable period of systematic expectant treatment, the attacks recur, or in the absence of such

treatment, after 2 or 3 acute attacks of gall-stone colic. Much depends, of course, on the degree of disability in either case. Very often the patient will himself decide the question in favor of operation. On the other hand, oftentimes both the patient and the doctor are of the procrastinating kind. That is to say, an attack having subsided, they fondly hope that no further recurrences will take place. Unfortunately, this hope is scarcely ever realized. Furthermore, it presents the risk of an emergency operation when the site of the infection, the gall-bladder, cannot be removed; instead of the more safe interval cholecystectomy with its infinitely greater chances of a cure. For, as we all know, postoperative morbidity is less after a radical than after a conservative operation.

As already stated, prolonged cholecystic and pericholecystic disease interferes with gastric and duodenal motility, a condition which is difficult both to diagnose and to treat. The history usually comprises 10-15 years of attacks of indigestion, consisting of epigastric fulness and burning, sour eructations coming on within an hour or so after meals, associated with attacks of more or less severe pain in the right upper abdomen. These attacks at first occur at varying intervals, but gradually the intervals grow less and the attacks more severe, with nausea and vomiting as concomitant features, occasionally followed by a slight icteric tinge but no frank jaundice. At operation, the pathology consists of a mass of pericholecystic adhesions, the fundus of the gall-bladder being fused into a hard mass to which the tip of a high appendix may be adherent and may contain pus; sometimes there is also a pressure ulcer in the duodenum. This may be an extreme example, but it occurs and is the result of a prolonged pathologic process.

These are some of the surgical aspects of biliary tract infection. If we are to keep in line with preventive work, it is our duty to make every effort to prevent their development and progress.

#### DISCUSSION

*Dr. Max Danzis (Newark):* One feels rather diffident to open the discussion of a subject so well presented by one of the master surgeons of the world and one of the most convincing speakers and great teachers.

There is no doubt that early recognition of gall-bladder disease, combined with careful evaluation of the indications for operation, will do a great deal to minimize both the mortality and morbidity resulting from prolonged biliary tract infection. There are several instances in my own experience in which prolonged suffering could have been obviated and probably several lives saved, if the operation had been performed soon after the presence of a persistent and troublesome gall-bladder disease had been established. Instead of operating upon these patients during the interval stage, when a reasonably safe operation could have been performed, we were compelled to operate either for an empyema of the gall-bladder, with or without perforation, obstructive jaundice due to common duct stone, or acute or subacute pancreatitis associated with gall-bladder disease.

With our present improved knowledge of this particular disease and with the development of better diagnostic methods which aid the clinician to arrive at a definite diagnosis in the majority of cases of true cholelithiasis or cholecystitis, there seems to be no real logical reason to submit our patients to prolonged medical treatment, which at best only alleviates and never cures the disease.

Every patient is entitled to palliative measures during his first attack of cholelithiasis or cholecystitis. They should be kept under observation, during and after the attack has subsided, so that the character and severity of the infection are definitely established; but as soon as the symptoms become persistent, operation is indicated.

One should not operate during an attack of acute gall-bladder colic, unless the pain continues to recur, with a persistent rise of temperature, associated with upper abdominal rigidity and a palpable tender mass which shows no evidence of any improvement for several days. The majority of acute attacks subside under palliative treatment. Instead of operating during the acute stage upon a distended and thickened gall-bladder, associated with inflammation of the upper abdominal peritoneum which makes extensive manipulation difficult and dangerous, one should wait until the inflammation subsides entirely. The patient should be given a chance to completely recuperate before operation is undertaken. Instead of doing a palliative operation of cholecystostomy in the acute stage, which may require re-operation later on, one can do a cholecystectomy with much less risk to life and a better chance for a complete cure later on.

*Hepatitis.* It has been shown by many investigators that very often the liver and biliary tracts are involved in gall-bladder disease. Klemperer and others have shown degeneration and necrosis of liver in biopsies obtained from patients suffering from acute catarrhal jaundice. They believe that the yellow atrophy sometimes seen in these cases is a terminal event due to autolysis of the liver cells by their own ferments, analogous to their autodigestion seen in pancreatic leakage.

E. S. Judd, A. C. Nickel and W. L. A. Wellbrock studied the association of hepatitis with biliary tract disease. They found that by submitting a fair-sized piece of liver, taken at the time of operation, and culturing it aerobically or anaerobically, positive results were obtained in 27 out of 37 cultures made from the liver substance. In 30 cultures made of the gall-bladder, 47% were positive. Their conclusions are that this condition (of hepatitis) may exist in the liver "even when recognizable change cannot be made out of the gall-bladder or bile ducts". They believe that

hepatitis may occur as a primary condition, giving symptoms similar to cholecystitis, and that removal of the gall-bladder in cases of primary hepatitis will relieve the symptoms.

In another series of 300 cases studied by E. S. Judd, the same authors conclude that the majority of surgically dissected gall-bladders in acute or subacute cholecystitis contain pathogenic bacteria.

Kolster and Goldzeiter have also made similar studies with somewhat similar results.

*Value of Glucose in the Pre-operative Stage.* Experimental work on animals by Graham, Opie, Alford, Mann, of the Mayo Clinic, and others, has demonstrated that there is a definite increase in the resistance of animals when the glycogen content of the liver has been increased by glucose feedings before exposing the animals to the toxic and infectious substances used for the experimental production of liver degeneration and yellow atrophy. It has been shown in the Mayo Clinic that dogs whose livers were removed for experimental purposes, and who were at the point of death, with a very low sugar content, recovered temporarily from their moribund state upon the intravenous administration of glucose. These experimental observations formed the basis for the pre-operative preparation and the postoperative treatment in gall-bladder disease by administration of glucose solution. It serves to protect the liver cell against the rapid autolysis seen in yellow atrophy, which sometimes occurs as a terminal complication and it lessens the possibility of hypoglycemia sometimes seen in these cases, and which is a factor in the so-called liver shock.

We have had several opportunities to demonstrate to our own satisfaction the value of intravenous administration of glucose in cases of severe shock associated with acute cholecystitis. In 2 cases seen recently, the patients presented such alarming symptoms of shock that a diagnosis of acute pancreatitis was considered. The extremely rapid and small pulse, very high temperature, moderately cyanosed skin, dry tongue and mild delirium, justified the consideration of such a diagnosis; but the absence of generalized rigidity, the presence of localized upper abdominal tenderness, and a palpable mass, led us to make a diagnosis of cholecystitis with associated liver shock. Operation at that stage seemed to be most hazardous. These patients received frequent intravenous injections of 1000 c.c. 5% glucose in the first 24 hours. The improvement in their condition during the first 24 hours was remarkable. Symptoms of shock gradually but steadily disappeared, and after 1 week's rest in bed, combined with the administration of large quantities of fluid, cholecystectomy was successfully performed.

*Non-Surgical Drainage.* My experience with non-surgical drainage has not been a very satisfactory one. Very frequently I have operated upon patients who have had repeated non-surgical drainages with hardly any improvement, and certainly no cure. The difficulty with the non-surgical biliary drainage method is the promiscuity with which it is used. I presume there are certain instances where some benefit may be derived from its use, but in the clean-cut cases of troublesome cholecystitis or cholelithiasis, it is just as useful as is the ice-bag in the cure of appendicitis. Once the gall-bladder walls become diseased, it should be removed. Study of the gall-bladder function was made of those cases subjected to cholecystostomy and it was found that, out of a number of patients submitted to cholecystography, at different intervals following the operation of cholecystostomy,



only 3% gave normal responses. The vast majority showed absent or impaired function. Even with those who remained symptom-free, the cholecystograms indicated impaired functions. Such gall-bladders constitute a potential source of future trouble. But even at the present stage of our knowledge some challenge the value of cholecystectomy as a rational method of curing gall-bladder disease.

I recently came across a statement in one of our surgical journals, which read as follows: "In the present stage of knowledge of liver function and pathology, it is just about as reasonable to do a cholecystectomy on a functioning though infected gall-bladder, as to cut off the tail of a sick dog."

The use of the T-tube for prolonged drainage in cases of cholangitis with obstructive jaundice due to large stone in the common duct, has been demonstrated in 3 of our cases to be a most satisfactory means of relieving the inflammatory condition in and about the biliary ducts. In the case of an elderly woman, jaundiced for 3 months as a result of a large stone in the common duct, the tube was left in situ for 6 weeks. The recovery was rather slow but complete in all of these cases. These patients usually come to operation in a very poor state of health after prolonged course of medical treatment. They figure most prominently in our mortality and morbidity statistics. Early diagnoses and prompt surgical intervention in clear cut cases of gall-bladder disease will greatly reduce the morbidity and mortality of this condition.

*Dr. J. Montgomery Deaver:* I heartily agree with everything Dr. Danzis has said. Particularly about non-surgical drainage in that operation. In these cases of gall-bladder disease, if the bile is cultured it is nearly always negative, but cultures of the gland and gall-bladder wall are positive in over 50% of cases and mostly show some form of streptococci. If that is the case, drainage will hardly clear the infection.

The other point is about glucose. In the Lankenau Clinic it is given routinely pre- and post-operatively in all bad gall-bladders. It not only tends to prevent liver shock but it shortens the bleeding time, and coagulation time, and has replaced the use of calceine.

### VALUE OF DUODENAL TUBE DRAINAGE OF THE BILIARY SYSTEM IN THE TREATMENT OF VARIOUS DISEASES AND DISORDERS OF THE LIVER\*

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In 1923 I published a monograph entitled "Non-surgical Drainage of the Gall-Tract", which presented a method of value in the diagnosis and treatment of affections of that region. The choice of the title was unfor-

tunate because this method became popularly known as non-surgical drainage of the gall-bladder. Had the title given to this paper been chosen instead, it is probable that less acrimonious debate in various medical and surgical circles would have taken place. While this discussion has been useful in some respects, nevertheless it caused the loss of valuable time because it confined the problem chiefly to gall-bladder disease, by all odds the least important, although the most common, of all diseases or dysfunctions of the biliary system when considered as a whole, and particularly so when considered from the standpoint of preventive medicine. Had the 123 pages of case reports at the end of the writer's monograph been read with care it would, even then, have become evident that duodenal tube drainage of the biliary system opened up a new avenue of effective treatment for various diseases of the liver and other associated components of the biliary system.

The chief purpose, therefore, of this paper is to again call attention to the efficiency of the duodenal tube in the treatment of various diseases or dysfunctions of the liver and its ducts, for the moment leaving the gall-bladder out of the discussion. Whether we are internists or surgeons, general practitioners or specialists, our aims are the same, namely: to prevent or cure disease or to improve the function of an organ when in a state of dysfunction, but not at the expense of injuring or destroying the underlying physiology upon which return of function will depend.

Apart from the gall-bladder, which, under some but not all conditions, does require removal in order to cure or benefit the patient, I wish to show that certain diseases in which the biliary system is directly or indirectly involved can be more effectively treated with the assistance of the duodenal tube than by other measures now customarily employed, whether medical or surgical. If the surgeons would add the duodenal tube to the equipment of their wards, and would themselves, or have some member of their staff, master the technic of its proper use, some patients would not require surgical service; many, thus *proopera-*

\* (Presented before the 165th Annual Meeting of the Medical Society of New Jersey, held in Asbury Park, June 4, 1931.)

*tively prepared*, would much better withstand operative shock and postoperative discomfort; many, thus *postoperatively treated*, would escape some degree of postoperative morbidity; and a few would dispense with the services of the undertaker. With it, one can do relatively less harm even if the job is bungled. One cannot say the same of the scalpel.

The liver, which cannot be removed, can be surgically drained. Such drainage means removal of infected or toxic material from the body. It is a surgical and medical axiom that *when external drainage is practicable it yields better results than internal drainage*. The simplest illustration is the lancing of a boil. The reason for this is that in internal drainage some reabsorption of toxins, or some further distribution of infected tissue, takes place and retards or prevents recovery. If there are 2 methods of attacking the problem in any individual case, and each method can be proved of value, the least dangerous to life or subsequent ill health should be chosen. This has been found true, for instance, in the management of peptic ulcer after 30 years follow-up of that subject.

Since 1925, abdominal surgeons have become more "liver minded". Many papers have been published on the surgical treatment of hepatitis, cholangitis, and, to some extent, cirrhosis. Surgical indications, on which surgical success is based, demand pathology. Such organs as can be removed without immediate death or too immediate postoperative mortality are removed. The history of the subject indicates that during certain periods many such organs have been needlessly sacrificed because of surgical over-enthusiasm or misjudgment. On the other hand, in late biliary tract disease there may be and frequently is an already co-existent hepatitis, cholangitis or both, and in some instances some degree of cirrhosis. Speaking broadly, this would appear to substantiate the claim of some surgeons that they receive their gall-bladder patients too late to accomplish as good results as an earlier cholecystectomy would have yielded. I have no doubt that in many instances this is true, and it undoubtedly contributes to the postoperative morbidity. Never-

theless, postoperative morbidity is still too frequently ignored. A large degree of such postoperative morbidity can be far worse for the patient or his family than his immediate death or a comparatively speedy exitus.

As painful as such a statement may be, we gain nothing in further progress unless we face the facts. For this reason I believe it important to briefly discuss this. No matter to what extent my experience may differ from that of others, I offer my own statistics, as follows: In a recent review of 1000 cases of biliary tract disease up to January 1, 1929, histories revealed that 128 of those patients had been operated upon before I saw them. They were, therefore, presenting themselves with secondary morbidity involving the biliary system, and of various degrees and types consistent with cholecystectomy, cholecystostomy and choledochostomy. Of those 128 patients, 32% had been subjected to 2, and 13% had undergone 3 to 9 abdominal operations; and 25 of the 128 previously operated upon were again referred by me for further gall-tract surgery; among whom there were 3 deaths, or 12% mortality; while a large majority of the other 103 patients were restored to health by non-surgical methods. In addition, there were 68 in this series referred by me for *primary* operation; being chosen with considerable care both for surgical indications and surgical risks. About 85% of them were for cholecystectomy. The surgeons selected were all master surgeons or, at least, in Class A group of surgeons. Of these 68 patients, 7 died, or 10.3% mortality. Of the 61 who recovered, 22 (36%) were returned to satisfactory health by operation alone; 39 (64%), however, developed post-operative morbidity that returned them to my observation. Although the morbidity varied greatly, many of them were cases of residual cholangitis and hepatitis which responded satisfactorily to postoperative duodenal drainage because they were recognized early by duodenal tube check-up.

I have, in earlier papers, stated the great desirability of rechecking by duodenal tube the presence or absence of latent or smouldering inflammation or infection in the liver or the ducts 6-10 weeks after gall-bladder opera-



tions. There is no accurate way of doing this save by the duodenal tube, the microscope and the culture flask. I believe it should be part of the responsible duty of the surgeon to his patient to see that this is done. If trouble is found, a few duodenal tube drainage treatments may be all that is necessary to prevent re-operation, a matter discouraging to both patient and doctor. This accounts for the 196 surgically managed patients in this series of 1000 cases.

The remaining 804 patients have been treated non-surgically by various combinations of methods; a large majority of them had duodenal drainage at some time or other for periods of 3 months to several years, with unusually satisfactory end-results. Of these, there were 621 cases of Grade I to Grade III cholecystitis, or catarrhal conditions of gall-bladder, cystic, or other extrahepatic ducts, which are omitted from discussion except where they fall into one or another of the liver groups with which this paper is primarily concerned. None of these patients, so far as I know now, has had occasion to appeal to surgery, although my records show that I tried to persuade 45 of them to accept surgical treatment; but they continue to be satisfied with the results achieved. And these results do not compare unfavorably with those observed in my surgical group.

Recitation of the cases to be presented appears to show that more can be accomplished in the general management of such patients than has usually been possible by utilization of the methods customarily employed. Because the case reports represent diversified pathology, and various dysfunctions, and yield apparently unrelated clinical pictures, it is obvious that one must search for the "common denominator". A large part of my clinical evidence points to the liver as the "common denominator". Therefore, the next step is to review the various accredited liver functions and see which of them are most frequently affected.

The following 7 functions of the liver have been generally accepted:

(1) In health to secrete a fluid called bile, which is useful to normal digestion; in disease to assist in excretion of various poisonous substances (secretory-excretory function).

(2) To assist in the metabolism of carbohydrates; here it performs an absolutely vital function in maintaining the blood sugar level (glycogenic function).

(3) To assist in the metabolism of proteins to the extent of forming urea, destroying uric acid, and de-aminizing the amino-acids (proteogenic function).

(4) An automatic chemical laboratory to destroy, neutralize, or synthesize various poisons brought to the liver (detoxifying function).

(5) To destroy, or render harmless, bacteria brought to the liver by the blood (bacteriacidal function).

(6) To store a part of the fat taken as food and release it when required. Most important, it desaturates fats, rendering them labile for metabolism (lipogenic function).

(7) To assist in iron and copper metabolism.

Although these various functions appear to be quite specific, it is highly probable that in many sick persons several of them may overlap or interlock; that is, when there occurs a primary breakdown of one function, there may soon occur a breakdown in one or more others. This is evidenced by the fact that no one test of liver function gives us full information regarding total function, but only the data that the one test is supposed to yield. Hence the importance of carrying out several tests. For the purpose of this paper I must go into more detail in regard to the detoxifying and bacteriacidal functions of the liver, for it is with those functions that my thesis is chiefly concerned.\*

#### THE DETOXIFYING FUNCTION

Recent work has indicated that the liver is capable of destroying many toxic substances but, in the long continued fixation of these injurious products, progressively destructive changes in the liver tissue also take place. For example, certain substances highly poisonous when administered hypodermically are much less harmful when administered by mouth

\*The paragraphs dealing with those 2 functions have been taken from the writer's revision of the chapter dealing with Diseases of the Liver, Gall-bladder and Biliary Ducts, in the last edition of Osler's Modern Medicine. Vol. 3, p. 722.

(curare and nicotin). Some toxic substances seem to have a selective affinity for the liver, producing a widely spread fatty degeneration (phosphorus phenyl-hydrazin, and more recently atophan and cinchophen) or acute cellular necrosis (chloroform). The liver is believed to exert a similar detoxifying action on the toxins of certain bacteria and on the products of bacterial putrefaction in the intestine, such as indol, skatol and phenol. In some cases these poisons are excessive in amount, or in virulence, and the liver is unable to handle them. There is no doubt that in disease the detoxifying function of the liver becomes more or less impaired, but there are no trustworthy diagnostic tests of this function. The phagocytic action of the Kupffer cells, assisted by certain cells of the spleen and of the lungs, have been shown by Opie to play an important part in the binding or fixation of inorganic particles (bacteria, colloid material and certain substances observed in the blood plasma). Clinically, anthracotic pigmentation of the liver is often found in advanced pulmonary anthracosis. There seems to be some elective activity on the part of the lobes of the liver to fix particulate matter brought to it in the portal vein. For instance, after injecting India ink into the splenic vein, deposition of such pigment is found largely within the left lobe, whereas the same substance injected into the superior mesenteric vein will be found deposited largely in the right lobe of the liver (Riemann). This may be due, however, to the mechanics of the blood circulation current in the splenic trunk of the portal vein, as suggested by Bartlett. This seems to throw additional light upon the clinical association existing between enlargement of the left lobe of the liver in syphilitic gumma, in echinococcus cyst, and in certain splenic diseases, such as Banti's disease, or hemolytic jaundices with splenomegaly; whereas, the hepatitis and cirrhosis resulting from chronic focal infective disease of the appendix, duodenum or gall-bladder, is found chiefly in the right lobe. Likewise, a solitary abscess due to entameba is more often in the right lobe.

#### BACTERIACIDAL FUNCTION

A healthy liver seems to possess the power of destroying, or rendering harmless, bacteria which entered the body by way of, or are elaborated within, the gastro-intestinal tract. It aids in destroying bacteria entering by way of the circulating blood, for many experiments have shown that the liver, assisted by the lungs and spleen, exerts an important function in removing bacteria from the blood stream. Here, too, the cells of Kupffer appear to have the most active phagocytic power. As in other functions of the liver, long continued assaults tend to wear down the bacteriacidal power and degenerative changes and, later on, destructive cellular lesions develop. Many workers have demonstrated that in bacterial focal infections of the appendix, in duodenal (ulcer) and gall-bladder infections, as well as in the intestines themselves (colitis), the liver, chiefly the right lobe, becomes chronically inflamed and cellular destruction gradually occurs. Sections from the liver removed at operation for other lesions show well developed hepatitis in the more acute cases and various grades of hepatitis plus cirrhosis in the more chronic cases (Heyd, Graham and others). These findings help to explain some of the symptoms occurring in patients with hepatic intestinal toxemia.

In connection with the 2 foregoing functions, I have been impressed with some observations that appear to explain the production of certain types of liver disease or dysfunction, as well as the postoperative morbidity which occurs after cholecystectomy. One is concerned with the contrast in effectiveness of external vs. internal drainage of bile. Perhaps it will clarify the matter somewhat if I refer now to the 3 vicious circles in biliary disease.

The first vicious circle is concerned with the lymphatic distribution which exists between the liver, gall-bladder and pancreas. If there exists a mural or interstitial cholecystitis of bacterial nature, the gall-bladder becomes a genuine focus of infection and the lymphatic distribution re-routes the infection to the liver and pancreas and back again to the gall-bladder. Cholecystectomy should break this first vicious circle.



The second and third vicious circles are concerned with absorption of bacterial and chemical toxins from the splanchnic venous bed and from the abdominal lymphatic circulation.

In patients who do not make a complete recovery by cholecystectomy, and who show subsequent morbidity, my hypothesis is that the second and third circles are operating and that the bile contains toxic substances or viable bacteria, which pass into the duodenum presumably to exit from the body by way of the fecal current. But, during their passage through the intestines, as is well known, part of the *toxic dose* is reabsorbed by the mesenteric blood supply and carried back by the portal vein to laboring liver cells, and a portion is reabsorbed by the mesenteric lacteals and thence by way of the thoracic duct with no detoxifying buffer, such as the liver, into the tired or toxic heart by the innominate or subclavian vein. Again, some of the *viable bacteria* focalized in the liver, in bacterial hepatitis or cholangitis, drain out with the bile, pass through the intestinal mucous membrane into the mesenteric capillaries, and thence directly to the liver by way of the portal vein; some of them directly infect the small and large bowel and thus, by dissemination, produce an enteritis, colitis or both; the *toxins* of some bacteria may be absorbed by the mesenteric lymphatics and be carried into the systemic blood, finally reaching the heart to contribute in producing toxic myocarditis with sufficient decompensation to produce chronic passive congestion in abdominal viscera, notably the liver.

Thus, briefly described, is my hypothesis of the 3 vicious circles in biliary tract disease. It is not unlikely that the same or a similar cycle of events is concerned in the toxemias of pregnancy and of uremia, and that here, too, the liver plays an important rôle in the toxemia, and that such patients might be improved by external biliary drainage. If the above hypotheses are tenable, the contrast between the effectiveness of external and internal drainage of bile becomes more readily understandable. On the other hand, many doctors believe that internal drainage is all that is necessary and rely upon various cho-

leretics or hepatic secretagogues, and their name is legion: such as calomel, Epsom salts, Pluto water, Carlsbad water or salts; the jalap, gamboge, colocynth and bryonia of older days which are now rarely used; various pills of bile salts or bile acids (often reinforced with aloin, phenolphthalein or cascara), such as veracolate, taurocholate, taurocol, holadin, zilatone, pancrobinin, caroid and bile salts, exicol, felamin, agocholan, etc. Any of these, given by mouth, are alleged to accelerate bile manufacture by the polygonal cells of the liver, or to increase the amount of bile discharged from the liver and gall-bladder, and thus increase internal drainage. But do the patients get well? Are they cured? In our experience, if such measures alone are used, they produce in the long run little, if any, improvement and may have merely added the constipation-laxative habit vicious circle to what they are already suffering.

Another group of doctors, still skeptical of the duodenal tube, depends largely on certain dietetic principles. If there is some degree of jaundice, they advocate a reduced protein and largely fat-free diet because of increased nitrogen retention due to lessened proteogenic function, and because of impaired fat digestion due to lessened bile flow. If there is no jaundice but evident cholecystitis, they advocate a fat-full diet because the gall-bladder physiologically best empties its bile in response to fat-rich foods. Both of these views are sound as far as they go. But do they go far enough?

If the jaundice is due to catarrh or infection in extra- or intra-hepatic ducts, the duodenal tube will assist in clearing it faster in conjunction, if you will, with some hepatagogue and a fat-low diet. This spares the liver cells, and at times the pancreatic cells, many extra days of pressure damage; a cardinal principle to be remembered. If the gall-bladder is inflamed in mucous membrane or wall, the patient has learned that he is intolerant to fats, because they increase his digestive discomfort, and he tells us that he has had to give up his eggs, cream, bacon, butter, olive oil or fried greasy foods. If he has small gall-stones, such foods tend to move a stone

into the cystic duct and he has learned to expect an attack of biliary colic. Therefore, as sound as the theory is, it is not always good practice to follow it. We have found it bad practice to squeeze a boil not only because it traumatizes surrounding tissue but because it hurts. We have found it bad practice to purge in appendicitis because intestinal overactivity literally flogs the appendix, tends to increase inflammation, spread infection and encourage perforation. I am not at loggerheads with the theory but assert that it does not go far enough, for I can say that 7 out of every 10 patients referred to me have gone through several years of such medicinal and dietetic management and their morbidity remains the same or is increased. I assert that something is missing and believe that "the something" is the effective therapeutic value of the duodenal tube. When such patients reach me, if they do not require operation, I do not necessarily discard such medicines or diets but merely add duodenal tube management, and I see them improve and they know how much better they feel. Flushing the duodenum directly with hot water or salt solution, and stimulating with repeated small douches of magnesium sulphate, peptone or olive oil, not only relaxes tension in the duodenal wall, and relaxes Oddi's sphincter, but encourages gentle contractile effort of the gall-bladder and promotes freer bile flow from the liver, gall-bladder and ducts. But the essential point, I believe, is that the bile is drained externally. Just what does external drainage of bile accomplish that internal drainage does not?

Assuming for the moment that my hypotheses are correct, I must argue that in removing from the body by means of the duodenal tube various amounts of bile—from pints to gallons—I am also removing appreciable amounts of toxic substances, appreciable numbers of unkilld, pathogenic and often highly virulent bacteria.\* These, thus removed from the body as they reach the duodenum, are therefore not available for reabsorption in the lower intestinal levels for return to the liver; they are, in diminished

amounts and numbers, less likely to devitalize intestinal mucosa and distribute infection; which may be the reason why patients so treated, gradually, sometimes rapidly, occasionally in most spectacular fashion, lose the clinical picture of toxemia and become vastly improved, and not a few are seemingly cured. And this is quite a lot to say of essentially chronic disease or long continued dysfunction.

By analogy, I can further develop my argument. How many of you remember that in the older days, when surgeons relied on draining rather than removing the gall-bladder, we marvelled at the clinical improvement in the toxic heart and the toxic kidneys; that the extra systoles and dropped beats and disordinated action of the heart often miraculously vanished; that the urinary albumin, ketones and casts disappeared while the patient was in the hospital and still discharging bile through the sewed-in rubber tube, or was saturating the dressings after the tube loosened its stitches and fell out? And how many of you were overwhelmed with disappointment or discouragement when half a year to several years later the patient returned to your observation with a nicely healed abdominal scar but complaining of much the same symptoms as before, and you found the heart again arrhythmic, the patient "heart conscious", and the kidneys reflecting the renewed toxemia? Could this conceivably mean that after internal biliary drainage was reestablished in the presence of residual hepatitis or what not, and reabsorption of toxic loads on the liver, heart, kidneys, intestines, brain, blood-vascular and neural symptoms had accumulated, that the return of the clinical picture was due to this?

I admit the desirability of evacuating by the scalpel an echinococcus cyst or a localized amebic abscess of the liver, but, for the following reasons, I do not admit the desirability of surgically draining the common duct by T-tube for diffuse disease of the liver such as occurs in hepatitis, cholangitis lenta, cirrhosis, or toxic manifestations of liver dysfunction, because there now is available an alternate method of lesser risk and proved value. All agree that common duct surgery is the most difficult gall-tract surgery and

\*Consult Chapter 19 "Non-surgical Drainage of the Gall-Tract"—Lea & Febiger, Philadelphia, Pa.



yields the highest mortality rate, and from my personal experience yields the highest morbidity rate. Injury to the common duct, even by experienced surgeons, is not uncommon and when it does occur it leaves the patient far worse off. When there is irreducible obstruction between the liver and Oddi's sphincter we *must* rely upon surgery alone. Otherwise, I advocate more extensive use of duodenal tube drainage because of its greater safety, its greater effectiveness if measured in terms of amount of bile drained, and finally because of the satisfactory results that have been achieved.

Several years ago, and again recently, I interrogated the surgical divisions of several hospitals in regard to the amount of bile-drainage secured in 24 hours after choledochostomy. This averaged slightly less than 500 mls. In a similar survey of our patients whose livers were drained and the bile mixture collected by duodenal tube, the average yield in 24 hours was over 1500 mls, in many instances 2000 to 3000 mls. Admitting that such a mixture represents salivary, gastric, duodenal and pancreatic fluid, as well as bile, our studies have indicated that when the patient is suitably controlled with atropin or belladonna, or with sedatives, at least 2/3 of it is bile. Comparatively seldom do we recover all of the bile secreted by the liver; some portion of it usually escapes recovery by the tube, because the feces only rarely become acholic. This observation makes me believe that the liver secretes more bile in 24 hours than the 600 to 1000 mls accredited to it in modern monographs of medicine.

The present method of more intensive drainage of the liver and ducts was described in 1925. Since then there have been only minor modifications in the technic. It is essentially a therapeutic procedure and was designed to emulate and afford an alternative method to surgical common duct drainage. Obviously, it must be restricted to patients who do not have irreducible obstruction of bile flow to duodenum, such as stricture of the common duct, cancer at the head of the pancreas, or extensive adhesions obstructing the bile flow. For such patients, surgical me-

chanics are better adapted provided an able and experienced surgeon wields the scalpel. Even in such hands, the risks the patient faces are not negligible; and in less able hands the results are often truly ghastly.

Experience with it has shown that if there is no mechanical obstruction of extrahepatic ducts, duodenal tube drainage will secure as much bile, probably twice as much, as can be obtained by surgical drainage; and with far less local traumatism. Thus, more effective relief of the diseased liver or ducts is afforded. It is the therapeutic method of preference in cholangitis, hepatitis, incipient hepatic or pancreatic cirrhosis, and the various conditions described in the case reports. Its rationale and the 2 vicious circles it is designed to break have been broken as briefly described above. It is generally well tolerated by the patient and will be found most beneficial. It represents roughly 24 hour drainage in each cycle of 48 hours. In sufficiently sthenic patients, these cycles may be repeated for 2, 3, or even 6 or more weeks. In the asthenic patient, 2 or 3 days of rest may be desirable between drainage cycles. It has the advantage of being stopped or resumed at will over longer periods than is possessed by surgery without detriment to the patient. But, more important, it avoids both operative and postoperative shock so serious in liver disease, and it avoids all possibility of injury to the common duct, such a real disaster to the patient and his family, as well as to the reputation of the surgeon.

The drainage nurse in charge should be efficiently trained. With proper adherence to technic, more than a gallon of bile mixture per week can be secured in many cases. I believe that this removes much toxic material from the patient, with corresponding clinical improvement.

In the *severely* jaundiced patient, caution should be observed that the liver be not "decompressed" too rapidly by removal of too large quantities of bile. Otherwise, cholemia or a state of hypoglycemia may be produced, with symptoms similar to those occurring in Mann's hepatectomized dogs. This can be prevented or controlled by an occasional glass-

ful of orange juice or lemonade containing 1 to 3 tablespoonfuls of sugar; or in emergency 25 gm. of glucose may be given intravenously.

I shall now report on a group of 639 patients in whom the biliary and associated systems were directly or indirectly involved, and who have been under observation for sufficiently long periods to submit them for appraisal in support of my thesis. This group is subdivided into: 146 cases of hepatitis and cholangitis; 387 cases of hepatic-intestinal toxemia; 11 cases of a group featured by epileptic-like convulsions and unconsciousness; 95 cases of early cirrhosis of the liver. In 26 patients, of this last group, the livers have been inspected at operations for removal of the gall-bladder or appendix, or for peptic ulcer, and have shown gross changes characteristic of the earlier stages of cirrhosis.

Case reports of one or more patients representative of the various groups are submitted. I wish to present subsequently a more condensed statistical report of the entire group. The case protocols presented have been chosen, not so much for their uniqueness, because, save one, they could be duplicated many times, but to emphasize by them the fact that the duodenal tube is a most important agent in combating the progressive nature of their disease.

The first 2 reports are representative of severe forms of hepatocholangitis, in one of which the result of treatment was permanently successful, and in the other temporarily helpful.

#### CASE HISTORIES

*Case No. 501.* Miss A. I., referred by Drs. Gibbon and Despard, was 17 years old when first seen April 2, 1917, suffering with an infection of liver and bile ducts. There was sufficient inflammatory edema of the common bile ducts to cause obstruction. She had been subjected to 3 major gall-tract operations and 2 minor operations in 3 years. In addition to this, she had 6 other hospital admissions, surgical and medical services, for nonoperative measures for post-surgical sequels, with diagnoses ranging from abdominal adhesions to hysteria and surgical neurasthenia. She had

been treated by bed-rest, external applications, salicylates, urotropin, morphin, codein, sodium phosphate, nux vomica, cascara, calomel and other drugs, and had been given various modifications of diet, with at best only palliative effect. At the end of this time she still had a chronic, infective hepatocholangitis, punctuated with exacerbations of the most characteristic type. The infective agent was the *Bacillus pyocyaneus*, which had been recovered from her surgical cholecystectomy for empyema 5 years previously. During the spring of 1917, while in an acute attack, the surgeons in charge, feeling that they had done all that was possible, transferred her to our service.

She was definitely septic, under-nourished and intensely jaundiced; with a leukocytosis ranging between 17,000 and 26,000 and low polynuclear resistance. She was suffering with acute paroxysmal upper abdominal pain and persistent nausea and vomiting. The muscles of her upper right quadrant were rigid and exquisitely sensitive to both light and deep palpation. She presented the picture of a case that would be considered clearly surgical if it were not for the fact that she had already had her gall-bladder surgically drained for an acute empyema, in 1912; that 6 months later her gall-bladder had been removed and her common duct drained; that 13 months later her common duct had been drained a second time and several small stones were removed which had probably formed in the duct as the result of biliary stasis associated with persistent infection and duct obstruction. The surgeons still had vivid recollections of the difficulties encountered in the 2 last operations in exposing the operative field on account of adhesions. This, then, was the first patient upon whom duodenal tube drainage of the biliary system was attempted. Although this case has already been reported in the writer's monograph, in 1923, I wish to add an additional 8 years' "follow-up" and to again direct attention to the fact that it certainly was not the type of case in which one would expect much success from a new and untried method of treatment.

This patient's obstructed common duct was



unplugged by the local douching of the duodenum with magnesium sulphate and by the use of hot, bland inflammation-allaying solutions of boracic acid and Ringer's salt. After over-coming the duct obstruction, we recovered thick, turbid, greenish-brown bile containing many pus cells, much inflammatory debris, crystalline elements and bacteria. The *B. pyocyaneus* was isolated in pure culture from this bile.

After the common duct had been unplugged, it was kept open by continual duodenal tube drainage several days, with direct disinfection and cleansing of the duodenal zone 3 or 4 times a day and jejunal feedings every fourth hour. After 1 week of this schedule, biliary drainage for 2 hours, followed by duodenal disinfection, was practiced every second day. By the third day the critical picture of this patient materially improved; paroxysmal pain subsided with the establishment of biliary drainage; septic temperature dropped, muscle rigidity relaxed, intense jaundice lessened, and the leukocytosis gradually subsided. During the next 4 weeks there were several milder exacerbations but from then on her final recovery was uninterrupted.

Aside from general supportive measures and the use of an autogenous vaccine given in repeated courses, she received no other treatment except biliary drainage.

After a 2 months' period of hospitalization she reported to the Out-Patient Clinic for biliary drainage 3 or 4 times a month throughout 1917-18, and thereafter at less frequent intervals. Now and then there was a tendency to transient jaundice, persisting until 1920, but no return of the chills, fever or sweats. She has now remained well for 11 years. She has had drainage about once a year since then to appraise objective findings. The *Bacillus pyocyaneus* has never again been recovered. She has married and has borne 5 children during the past 10 years. She was followed with interest over the first pregnancies because of an apprehension that such an occurrence might overload her liver and precipitate a relapse. This, however, never occurred despite the fact that over a period of 8 years her liver had been severely damaged.

This indicates that the hepatic margin of reserve is very great, and that more hope for ultimate cure can be held out for such patients, particularly in younger decades, if they receive adequate treatment.

*Case No. 2350.* Mr. R. S., referred by Dr. Damon B. Pfeiffer, was 59 years old when first seen April 4, 1930. Chief complaint was chronic obstructive jaundice for 2 years; chilliness; feverishness; nausea and vomiting; loss of weight. In 1921 he had 3 gall-stones removed and a cholecystostomy with a satisfactory result until September 1927 when gall-stone colic recurred and at operation a long stone was found tightly impacted in the cystic duct. It probably required a low cystic duct ligation, thereby injuring the common duct, since 3 days later this patient became obstructively jaundiced and remained so for 2 years, until September 1929. This jaundice gradually assumed the greenish-bronze type suggestive of malignancy at the head of the pancreas, until he was reexplored by a second surgeon (Dr. Pfeiffer) who found no evidence of cancer of the pancreas or liver, but the common bile-duct could not be identified in the mass of adhesions. The liver was found enlarged with evidence of hepatitis and cirrhosis. The pancreas was hard but not greatly enlarged. Dr. Pfeiffer was able to do a catheter anastomosis between the common hepatic duct and the duodenum, which promptly established liver drainage and in 3 weeks jaundice had greatly decreased. A few weeks later, following a grippal cold, he again became jaundiced and remained so until seen by me on April 4, 1930.

On physical examination he was found to be intensely jaundiced in skin and scleras, of the greenish-bronze type; skin excoriated from scratching; emaciated; arms wasted to "broom sticks"; weight 97 lb., representing 53 lb. below normal average; temperature range 97° to 99.5°; pulse range 85 to 100; blood pressure 120/85, despite pronounced arteriosclerosis; tongue heavily coated; pyorrhea; gingivitis; sordes; lungs relatively normal; heart, diminished myocardial reserve. Abdomen: retracted, scaphoid; visible enlargement of liver, palpable to 12 cm. below

tip of ninth rib, with enlarged Riedel's lobe laterally; both, right and left, lobes enlarged. Over the mass of liver presenting below the costal margin was a rounded, dome-like area, somewhat roughened to palpation and quite hard. The edge of the liver was more sharp than rounded. Surprisingly few telangiectases and few angiomas. No other abdominal masses palpable. Spleen could be felt and area of dulness was enlarged. There were no varicose veins, and no ascites. Blood count: Hemoglobin 68%; R. B. C., 3,610,000; color index 0.9; W. B. C., 11,600; polymorphonuclears, 68%. Blood chemistry, 5 examinations: glucose 61, 66, 69, 69 and 68 mg.; cholesterol 400, 376, 296 and 202 mg. Icterus index 77, 54, 46, 33, 27.5; van den Bergh direct delayed and biphasic reaction positive, indirect reaction positive. Urinalysis: relatively normal except faint traces of albumin; urobilinogen 1-160; Gmelin + 4; occasional bile-stained pus cells.

On initial duodenal intubation, April 4, 1930, no bile was recovered, but after transduodenal stimulations with hot water, normal salt solution and magnesium sulphate, there were recovered large quantities of whitish-gray worm-like casts, apparently derived from dilated intrahepatic bile-ducts. Many of these were branched and varied in length 1-5 cm.; along the edge could be detected a faint bile tinge. Microscopically, these were demonstrated to be muco-pus casts with enormous numbers of polymorphonuclear leukocytes and a high bacterial flora of bacilli and cocci culturally identified as *B. coli communis* and nonhemolytic streptococci. The total amount of this material secured on first drainage covered the bottom of an 8 oz. drainage bottle to a height of 1½ in. Following the recovery of these multiple casts, a small amount of bile was secured, of a deep greenish-black color, very thick, and containing much slimy, flocculent material, microscopically showing pus cells in abundance, much necrotic material, and many broken down "shadow cells" of columnar epithelium slightly bile tinted. As a result, it became evident that the anastomosis between the common hepatic duct and the duodenum was still patent, and the jaundice was due to intrahepatic duct block.

He was admitted to Jefferson Hospital April 7, where he was given short biliary drainages every day or every second day, until his discharge on May 2, and was also given a vaccine of *B. coli* and streptococci. During this time bile flow became fairly well established; a total of 6490 mls (1½ gal.) was recovered. This bile gradually decreased in viscosity; the color improved from greenish-black to greenish-yellow; decreasing quantities of intrahepatic biliary casts were recovered, but large amounts of dense, slimy, flocculent material, with pronounced oleaginous degeneration but of a lighter yellow than seen in cystic duct catarrh.

His drainages were continued at home at intervals decreasing from twice a week to once in 10 days. Altogether, several gallons of bile were recovered. He had occasional over-night drainages which yielded 1500 to 2000 mls each. This, however, apparently decompressed the liver too rapidly and he temporarily rejaundiced, so that weekly, short, morning drainages appeared to be more effective. With this schedule he was gradually becoming less jaundiced and, as noted above, his icterus index and blood chemistry improved; enlargement of the liver gradually decreased and the surface became less dome-shaped and irregular. He gained in strength, in appetite and digestion, and increased 20 lb. in weight.

*Comment:* Although the outlook for this patient was still distinctly problematic, in view of a badly damaged and structurally altered liver, with probability of marked dilatation of the intrahepatic ducts, the improvement secured was encouraging. The problem was to keep the duct system as clear as possible of casts and flocculent material that otherwise would obstruct bile flow and return him to obstructive jaundice. Obviously, the anastomosis between the hepatic duct and the duodenum was still patent. It is questionable whether further surgical intervention could improve the situation. Therefore, it was fortunate that duodenal tube drainage could be helpful in his case. Although in cases of obstructive jaundice of shorter duration I have many times recovered muco-pus casts of the common bile duct alone, of the common bile



and pancreatic ducts, and of the common duct and cystic duct, and numerous biliary thrombi of the Naunyn type from the liver, this is the first patient from whom I have recovered casts from a dilated intrahepatic biliary tree, proved by necropsy. I, therefore, consider this case most exceptional.

He continued steadily to improve until the last week of January 1931, when he caught cold and shortly thereafter had a return of the digestive upsets with abdominal pain; considerable chilliness and feverishness; moderate jaundice; considerable nausea; loss of appetite and weight; bowel movements did not become acholic, and duodenal drainage at weekly intervals was still quite free, but a darker greenish-yellow with considerable slimy sediment, without definite casts. From this time on he began gradually to weaken and became bedfast about February 20, with evening chilliness, followed by rise of temperature to 102° or 103° for a few hours and then profuse perspiration. His last 2 drainages on February 21 and 28 yielded respectively 750 and 630 mls without need of stimulation. His bowel movements remained a dark yellow-brown up to the day before death on March 4, 1931; therefore, he appeared to have no external hepatic block.

General interpretation of symptoms, in consultation with Dr. Enoch, his family physician, on February 25, was as follows: Probability of acute suppurative hepatitis, not in the sense of localized formed abscess but diffuse hepatic abscesses not draining well into internal hepatic tree; probability of extensive perihepatitis superimposed on biliary cirrhosis, and the clinical interpretation was confirmed by necropsy findings.

*Case No. 649.* Mr. L. J., referred by Dr. L. F. Mulford, was 28 years old when first seen October 1, 1919. He had a severe attack of typhoid fever lasting 6 months when 10 years old; since then, recurrent attacks of mild jaundice. He was addicted to the frequent use of calomel and other laxatives, to control what he called "bilious attacks, constipation, acne vulgaris and auto-intoxication". In 1917 his appendix had been removed to relieve this condition but proved in-

effectual. I had then been interested in biliary tract drainage for about 2 years. Between 1920 and 1922 he was given a number of 3 hour drainages, the results of which failed to incriminate the gall-bladder. The "B" fraction always appeared quite normal, but the "C" fractions were turbid and contained considerable flocculent material, microscopically showing bile stained mucus, a few pus cells and duct epithelium. He relapsed so frequently into bilious attacks with slight jaundice that he became discouraged and asked to have his gall-bladder removed. Yielding to my curiosity to see what his gall-bladder would look like, the operative arrangements were made. On February 22, 1922, at operation by Drs. Despard and Mulford, the gall-bladder appeared perfectly normal. The liver edge and surface, as far as visible, was everywhere finely scarred with connective tissue infiltration in such a way that it resembled the laminations seen when plate glass is splintered along its edges. It was somewhat enlarged and quite hard and in gross appearance appeared cirrhotic. The head of the pancreas was enlarged and hardened. The surgeon removed the gall-bladder, which contained no stones, and microscopic sections were normal.

It was agreed by the doctors present to tell this patient nothing of the condition of his liver so that he might receive as large psychic benefit as possible from the removal of his gall-bladder. He returned to New York and was put on an orthodox text-book program of management for cirrhosis of the liver, and reported for follow-up examinations at intervals of 6 months. In October 1924 (32 months after operation) there had been no relief of his recurring sense of biliousness, headaches, mild jaundice, and toxic disability despite calomel every 2 weeks and a biliary drainage about once a month. His liver had gradually enlarged; he had lost about 20 lb. in weight; there was no ascites, but there were pronounced telangiectases along the costal margins, suggesting beginning portal obstruction. He seemed to be distinctly "slipping".

He was then informed that he had cirrhosis of the liver. The orthodox management having failed to give results, he was elected, with

his consent, as the first patient to undergo a new and intensive plan of liver drainage by duodenal tube. This, as stated, was designed to emulate surgical choledochostomy in patients who had surgical unobstructed common ducts.

He was admitted to a hospital as the first experimental case, although he was reported as Case II in the *Jour. A. M. A.*, Vol. 85, Nov. 14, 1925, in which this method was described. In that paper you will find this report: "From a man with cirrhosis of the liver with sub-jaundice  $2\frac{1}{2}$  years after cholecystectomy, 19,760 mls (5 gallons) of bile mixture, weighing 40 lb. (18 kg.) was recovered in 133 drainage hours, over an 18 day period, or at the rate of 140 mls an hour, or 3360 for each 24 hours. His weight on admission was 121 lb.; on discharge 123 lb. One year later he was reported greatly improved, was no longer jaundiced and had gained 30 lb."

I can now give an additional 5 years follow-up on this patient. He has apparently made a complete recovery, so far as can be detected by clinical observation and laboratory tests. He has never re-jaundiced; his liver has returned to normal size, to palpation and percussion; has increased his weight gain an additional 10 lb.; digestion is entirely satisfactory. He was last under observation during October 1930.

The following case represents one of a group of 11 patients featured by epileptoid convulsions and unconsciousness.

*Case No. 2282.* Mr. C. S. P., referred by Dr. C. H. Arnold, of Ardmore, was 66 years old when first seen October 22, 1929, complaining of convulsive attacks followed by unconsciousness. When about 28 years of age he was very active in athletics, and during that time had frequent bilious attacks with nausea and vomiting of dark greenish material. His last attack of this character was in 1890, after running a mile race. Although he was never skin jaundiced during this early period, since the beginning of his present illness he has had a tendency to light-colored stools, approaching putty color, with urine the color of strong tea, and transient jaundice.

Since January 18, 1924, he has had 19 additional attacks; 2 in 1924; 2 in 1925; 3 in

1926; 3 in 1927; 3 in 1928; 6 in 1929. The initial attack began at 6.30 a.m., when he fell in the bathroom. In another attack during the fore-noon he fell in a public place; in a third attack during the fore-noon he fell in his own office. His family physician (Dr. Arnold) had never witnessed an attack from beginning to end, except a mild one in which the muscles were in tonus and the jaws were grinding. The patient's wife, however, described the attacks as a tonic stiffening of the muscles of the body, chiefly the extremities, with the hands moving upward to the head and the arms partly crossed, legs extended and stiffened, teeth clenched and tongue and lip often bitten; no statement as to position of the eyes or mouth frothing. The period of unconsciousness is from 5 to 45 minutes. After the convulsion he breaks out in dripping perspiration, the muscles gradually relax, consciousness returns easily and quickly and he becomes nauseated and vomits bile.

Until 1928 there was no premonitory aura but since then he has noticed a peculiar sensation—like that of snuffing ammonia into the nostrils—which gives him slight warning so that he is often able to get to a chair, but he has often fallen and hurt himself. The more severe attacks have come on during the late evening, or during the night or early morning, while in bed. He had been treated with luminal; potassium iodide; calomel courses; oxycystin; various intestinal antiseptics, such as salol and urotropin; some digestives, such as elixir pept. enzyme, takadiastase, and acidophilus preparations. Perhaps the most important observation in this particular case is a definite statement that from 3 to 7 days before attacks his stools become light yellow to putty colored, his urine dark and containing bile, and he has transient jaundice.

After routine clinical study, his diagnosis was grouped as follows: No other ascertainable explanation of nature and cause of attacks is as suggestive as hepatic-intestinal toxemia; toxic subfunction of kidneys; gastropancreatic subfunction; achylia vs. atrophic gastritis; arterial hypotension despite well marked arteriosclerosis, focal infection in tonsils and 1 tooth root. Hepatic function tests: van den Bergh delayed direct reaction;



icterus index 11 (zone of latent jaundice). Spence-Brett levulose test: Fasting blood sugar 68 mg. per 100 c.c.; 42 gm. levulose in lemonade by mouth; 30 minutes later, blood sugar 111 mg. per 100 c.c.; 30 minutes later, 93 mg.; 30 minutes later, 77 mg. Gastro-intestinal x-ray study by Dr. W. F. Manges summarized: "adhesions involving the gall-bladder; probable cholecystitis, to Graham test; stomach and duodenum normal; numerous diverticuli in transverse and descending colons. Radiogram of skull: There is a polyp in the right maxillary antrum; the other accessory sinuses are clear; bones of the skull have normal thickness, perhaps slightly more vascular than normal but the variation is not sufficiently marked to warrant a positive diagnosis of lesion; sella turcica is within normal; no positive x-ray evidence of lesion within the skull. There is suggestion of sclerotic changes in the right half of the pelvic bones." He was referred to Dr. D. J. McCarthy for a neurologic study, and he reports: "After reading your notes, supplemented by my study, this case impresses me as one in which the important factor is the influence of the biliary and gastro-intestinal toxemia on a man with an arteriosclerosis and whose brain and circulation may, to a certain extent, be disturbed by a kidney factor. The influence of the focal factors, tonsils and teeth, on the kidneys cannot be entirely disregarded. The antral polyp may act as a reflex factor. I have always considered the gastro-intestinal tract a major factor in a large number of cases of epilepsy. I think the intestinal factor may act in several ways: (a) directly in the way of toxic absorption; (b) reflex from stomach by distension and disturbance of the circulatory mechanism; (c) both as a drag and reflex factor; (d) where associated factors, such as liver and gall-bladder enter into the situation."

The keynote of his management has been drainages of the biliary tract, of which he has had 43 over a period of 19 months; gradually reduced from twice a week to once in 4 months. The amount of bile drainage secured has been 9025 mls, or an average of 210 mls per drainage. Of this, 6055 mls represented liver bile, or an average of 141

mils per drainage. This is a great contrast to the amount of liver bile secured in normal persons, or those ill with gastro-intestinal difficulties, other than hepatic torpor. Such patients in a 3 to 4 hours drainage session will yield on an average 300 or more mls. This suggests marked sluggishness on the part of the secretory and excretory function of the liver. This patient's liver bile was unusually turbid and of increased viscosity. There did not appear to be infected bile, since repeated cultures failed to grow out viable bacteria. The microscopy of the bile was more suggestive of catarrhal factors than inflammatory. Abnormal amounts of lecithin were observed. From this patient quite frequently a peculiar milky white fluid has been obtained from the duodenum, the nature and source of which is not clear. The hepatic stimulative effect of drainages was evident in increasing the amount of liver bile recovered from early averages of approximately 80 to a final average of 140 mls. However, even this latter figure is only 2/3 that of normal.

*Clinical results.* This patient has had only 1 mild convulsion in a period of 19 months, and it occurred when the interval between drainages was lengthened out too abruptly. In a group as small as this, one must learn by individualization how frequently such external liver drainage must be done. Although a good result in this case has been secured by the intermittent plan of liver drainage, I am of the opinion that in some cases 4 to 6 weeks of intensive drainage might be better. In none of the 11 patients has the Fay treatment been employed unless it may be considered that bile drainage by means of magnesium sulphate brings about sufficient dehydration of itself. In 5 patients the use of luminal was discarded entirely; in 3 it was continued in reduced doses for 2 to 3 months, although its previous exhibition alone had been ineffectual.

Finally, there is a large group of patients who give histories of atypical digestive symptoms, "dyspepsia", "nervous indigestion", and "biliousness", with anorexia, constipation, headache, scotomas, nausea, belching, flatulence, dizziness or vertigo. They show various skin changes, sallowness, swarthy, swarthy,

petechia, "liver spots"; and telangiectases—suggesting biliary or portal cirrhosis—but no definite evidence in physical examination, x-ray studies, or drainage findings, to condemn the gall-bladder or appendix. In many patients of this group the gall-bladder and appendix have already been removed without improvement. Many have disturbed sleep states, are subject to nightmares or queer fantastic dreams; have involuntary muscular twitchings; painful cramps in lower leg muscles; foot cramp or toe cramp, the great toe often pulling backward in spasm. Such patients usually relate that they are utterly unrefreshed in the morning, even after 10 or more hours of heavy sleep, and awake feeling "toxic" or "doped". Some may have pronounced fatigueability; some are unaccountably drowsy during the day, particularly after meals. They are "chronically tired"; "can't get enough sleep"; "cannot concentrate"; they lose mental alertness; speak of being "mentally confused" and of "increasing forgetfulness", etc. Blondes develop gradually increasing sallowness; the brunettes increased pigmentation of skin or swarthinness. The sclera is slightly jaundiced; stools often deficient in bile; urobilinogen index in the urine is high. The outstanding clinical impression in many of them is that they appear "toxic".

What is the diagnosis in such patients? For want of a better, I classify them as hepatic toxemias; as intestinal toxemias; or, when symptoms overlap conspicuously, hepatic-intestinal toxemias.

Sensible regulation of living; more fresh air; sunshine; more exercise; suitable dietetics and particularly duodenal tube biliary drainage, will secure much better results than calomel, laxatives, purgatives or other drugs. Formerly, colonic irrigations were a routine part of the program, but in too many cases, if too long continued, seemed to increase the toxemia rather than improve it. An occasional colonic irrigation may be useful, but only in the beginning.

In many cases in this group spectacular improvement, in some brilliant cures, have been brought about. If biliary drainage is omitted from the above program the results are so conspicuously less favorable that the patients,

familiar with its apparently detoxicating effect, will demand it. I do not mean to infer that all patients so afflicted are cured. But, at least, none of them are made worse, and in those unimproved after an adequate trial, I suspect that I have misdiagnosed them.

The following case is representative of this group of 387 patients:

*Case No. 1129.* Miss E. M. R., aged 42, a school teacher in New Jersey, was referred to me on March 3, 1921. Aside from a severe attack of typhoid fever complicated with pneumonia, duration 4 months, 27 years previously, she had never been really ill. With insidious onset about 5 years before (about 1917) and with steadily increasing intensity, she gradually developed nausea, increasing swarthinness and headache. She had vague indigestion, but no clinical evidence of cholecystitis, appendicitis or colitis. She had been a constant user of various "liver pills" although she asserted that she had never been troubled with constipation. I saw her infrequently between 1921 and 1925. She was taught biliary drainage technic and took home-drainages periodically. In February 1923, she relates that a drainage every 2 weeks seemed to hold her symptoms in check. If she went over 4 weeks the attacks became severe. She became, as she says, "top-heavy", very dizzy, extremely nauseated with napal and coronal head pressure, "dancing specks" in eyes (scotoma) and on several occasions has fallen to the floor or street with vertigo and momentary unconsciousness.

By July 1925, she stated that she had managed to keep in a fair state of health only by means of home drainages, which she said "she could not possibly do without". There has been progressive tendency to the group symptoms as mentioned above. She had become more swarthy, with brownish pigmented areas on cheeks and body; icteric scleras; dried-out skin; 15 lb. loss in weight. Headaches occurred more frequently, several times with explosions of severe prostration, excessive dizziness, nausea and vomiting. van den Bergh direct reaction negative; indirect reaction 1.2 units or  $2\frac{1}{2}$  times the normal. Icterus index 17; levulose test—50 gm. of



levulose gives rising blood sugar curve and temporary levulosuria.

It was evident that although biliary drainages given every 2 weeks were of some benefit they were not keeping pace with the increasing toxemia. She was prevailed upon to enter a hospital for 3 weeks of continuous liver drainage. This yielded 10,935 mls of bile mixture ( $2\frac{3}{4}$  gallons) weighing 45 lb. or an average of 16.3 lb. per gallon. I have found that the gallon of normal bile mixture (representing, of course, some salivary, gastric, duodenal and pancreatic fluid as well as bile) weighs 6 or 7 lb. In cases such as the above, the bile is unusually thick, of high viscosity and contains a large amount of catarrhal flocculent material which greatly increases its weight. It is usually turbid and drains much more slowly because of its stringy viscosity.

This patient's admission weight was  $124\frac{3}{4}$  lb., her discharge weight  $129\frac{1}{2}$  lb. The clinical evidence of detoxication was immediately striking, but the important question was—how long would it last? I have found that in some cases such intensive courses of drainage may be required once every 1 or 2 years; in the majority of cases the more thorough periods of drainage seem to yield, as in this patient, better results, if followed by occasional short morning or over-night drainages 4-6 times a year.

Her final report as of record February 2, 1931, shows that she has not lost a day's work in 4 years; has not required the services of a doctor except reporting by letter or in person about every 6 months; has gained to her best weight of 148 lb.

This is not an unusual case for I have many patients from other states who are seen at infrequent intervals, dropping in to see me when passing through Philadelphia, to tell me they consider that use of the duodenal tube "has saved their lives" or at least "made life more bearable". I dislike to use such phrases but they are true; they reflect the attitude of the patient and perhaps should be made a matter of record.

As useful as I believe non-surgical biliary drainage (preferably called duodenal tube biliary tract drainage) as applied to the selected

gall-bladder, I believe its greater field of usefulness is in the treatment of states of liver disease or dysfunction. I believe the keynote is the external drainage of toxic bile. But, what are the toxins? We do not know, we cannot as yet name them, weigh them or measure them. Suitable methods for doing so have not yet been introduced. Much further research may be necessary, or the answer may come unexpectedly from some quarter. My hypothesis is that in such cases the liver has lost, in varying degree, its detoxifying ability or its bacteriacidal power, or both.

Since 1925, I have come to believe that there is a better possibility of relieving deep-seated organic pathology involving the liver and bile ducts. Of course, structural changes within the liver and ducts in chronic cases may, and probably will, remain unaltered. But it is conceivable that the progressive damage that we have been led to expect may be retarded or aborted if some part of the toxic load is lifted from liver cells struggling to regain their noteworthy margin of reserve. It would appear that states of liver dysfunction alone can be so improved as to make it less likely that structural alteration will occur.

#### DISCUSSION

*Dr. George H. Lathrope (Newark):* The last 10 years has marked a very distinct advance in the bulk of research concerning liver functions, and I think that a great deal of the stimulus to such study has been derived from Dr. Lyon's work. To me that is the chief value of his work.

The question of therapy. I am going to leave for others to discuss. The only thing that I want to say, somewhat heretically, is that the duodenal tube has been to me a very disappointing instrument both from the standpoint of diagnosis and of therapy.

In regard to the questions of liver function, I want to make a couple of suggestions to the general medical man, the general practitioner, who gets hold of disturbances of physiology in their early stages, long before they come to the laboratory and research hospital. If all medical men, as they go about their daily rounds, would make careful observations, careful notes, and at the end of every 5 or 10 year's period sit down and study, and then turn in, the results of those observations, there would be a vast amount of fact added to medical knowledge which is not now available. The general practitioner rather disregards his rôle as a research man.

There are 3 important liver functions—Dr. Lyon mentioned 7, but I think the 3 really important ones are: the glycogenic function, of which we know a very fair amount; the biliary function, of which we know a good deal; and the detoxicating or proteopexic function. It is an interesting thing that of all the tests we have of liver function,

about 8 out of 10 concern the biliary function. The glucose tolerance test is a measurement of glycogenesis. The hemoclastic crisis test is possibly a test of the detoxicating function, but Dr. Lyon indicated the fact that about this detoxicating function we know comparatively little.

One thing that I want to bring up is, that the question of uric acid chemistry enters in. The parenchyma of the liver is supplied by the portal vein bringing blood from 2 sources; the mesenteric bringing the end-products of digestion; the splenic veins bringing blood from the general circulation. Uric acid is probably brought into the liver from both of those sources. We are prone to think of food as the great source of uric acid bodies. Personally, I question that, especially in pathologic conditions, for our own experience is that regulation of diet has very little to do with regulating a high blood uric acid. I think most of the bodies which are brought from the intestinal tract to the liver are, as a rule, fairly easily handled. As to uric acid which comes from the body at large, in chronic low grade infections, we find the blood uric acid increased in a certain proportion of cases. Probably its source is the broken down nuclei of white blood cells at the site of a focus of infection, and we have come to feel that a high blood uric acid is apt to be significant of a chronic infection; for we have reason to believe that with control of a chronic infection the amount of uric acid in the blood decreases.

One other observation in regard to liver chemistry. This perhaps is a little bit sketchy but I believe that in the study of achylia we shall learn something about liver function. In pernicious anemia we have, as a rule, sooner or later, a complete achylia. We have long known that the use of hydrochloric acid is a great help to pernicious anemia patients, improving their digestion, and improving their general condition. Since the use of liver extract has come into vogue, with its astonishing and dramatic improvement, if not cure, of pernicious anemia, a good many observers have said that they do not need to use hydrochloric acid in conjunction with the eating of liver. We always give both. This gave rise to a rather curious observation not long ago. A patient had come to us some 5 years back, age about 45, complaining of diarrhea existing for 30 years or more—loose bowels, not diarrhea; 4 to 5 loose stools a day. He had no anemia; never had been anemic; but he had a very marked gastric sub-acidity which was evidenced by the fact that as soon as 30, 40, or even 60 drops of dilute hydrochloric acid were taken with his meals there was very considerable improvement of his bowel condition. However, that improvement was not a satisfactory one. He would go along for 2 or 3 months fairly comfortably, and then have a loose period again even when taking the acid. Last November; talking this thing over with him, I suggested, from a certain analogy with the gastric condition in pernicious anemia, that he take liver extract. He did so, and I did not see him again until about 10 days ago when he passed me on the street and shouted out—"I haven't had a bit of trouble since last November."

There is something there that needs to be correlated with the liver function; that is, the question of the gastric glands. We have clinically a great many sub-acid states; meet them in our hypothyroids, for instance, and we need a great many observations, from all sorts of angles, to find out where the liver comes into play in these conditions.

Another interesting relationship of the stomach

to the liver concerns postoperative cases where gall-bladders have been removed because of infection, and following a period of apparent improvement comes a recurrence of symptoms, pain and indigestion, toxic attacks, and cases of the type that Dr. Lyon has described. Some of those patients are very distinctly *hypo-acid* and a great deal of their trouble is corrected by the mere addition of hydrochloric acid to their regimen. The general practitioner must see a great many cases of hepatitis, that is, enlargement of the liver associated with some mild or moderately severe sickness, must see a great many more of those than get to the hospital or the clinic, and his observations on these things should be recorded because of their importance.

I have gone rather far afield in what I have had to say but I want to say again that I think we are very much indebted to Dr. Lyon for stirring up interest in the general question of liver function.

*Dr. A. E. Jaffin* (Jersey City): The remarks of Drs. Lyon and Lathrope invite me to burden the audience with a few clinical observations. I think they both touched on recent experiences which show that they are discussing from different angles a functional disturbance, sometimes organic, known to many and written about by some under the heading of "duodenal stasis". While knowing very little about the subject myself, a case in point is worth citing.

A man who, in November, after grippe, continued feverish, developed mild jaundice with a definitely high icteric index. Studies revealed nothing organic besides a large liver and moderate anemia. Fluoroscopically, a very peculiar, distended duodenum with reversed peristalsis was observed, which at the time was not given sufficient credit as a factor in the symptomatology. The length of the case, however, in its benign course, began to throw out the various possibilities of severe hepatic disease, malignancy and supuration, and a re-check of the findings made it appear that this man probably had, in connection with an absence of free HCL, a biliary picture which was very likely one of the types of cases in which Dr. Lyon has had so much success. While it is not possible for all practitioners to have the same skill and facilities that Dr. Lyon and his pupils have, a simpler method may, perhaps, be used if you will give, in addition to acid, a pint of warm saline in the morning. But I think of far greater importance is study of the disturbed physiology of the bowel, where it is not organic, and the avoidance of errors in modes of life and diet; the elimination of cathartics, and so forth.

*Dr. S. F. Wade* (Elizabeth): Dr. Lyon, would you add in your closing remarks your experience with biliary drainage in toxic cases, in people of 40 years of age or more, who show a mild diabetic type controllable entirely by diet? Do you get much help with the duodenal tube in such cases?

*Dr. William N. Barbarito* (Jersey City): I would like to ask Dr. Lyon if galactose and levulose tests are of any importance in determining liver function? So far as I know, abroad these 2 tests are considered very definite for destruction of the liver parenchyma.

*Dr. Maurice Asher* (Newark): I would like to add my mite to Dr. Lyon's paper in reporting 3



cases of hepatitis, one of which was due to atophan poisoning. Dr. Rabinowitz, of Brooklyn, in an A. M. A. Journal of recent date, has reported a number of cases of cinchophen or atophan poisoning in which the mortality was rather high. I haven't the data here but this patient was a young woman who had taken a number of grains of atophan and became jaundiced. I was rather alarmed over her condition, because of the high mortality in such cases. Duodenal drainage promptly cleared her up. I think she had about 7 drainages of 4 hours each, and she became perfectly well and the jaundice disappeared. Then there were 2 other cases of hepatitis in elderly men with the usual gastro-intestinal disturbance and with jaundice and tenderness over the liver. The diagnosis of hepatitis was established. One man was so ill that he came with the diagnosis of carcinoma, but our tests did not substantiate that diagnosis. Both cases cleared up under biliary drainage. The one with the supposed carcinoma is entirely well and the other—still under treatment—has improved and has returned to business.

*Dr. Max Danzis (Newark):* Dr. Lyon mentioned in his paper that a survey of a certain number of patients submitted to cholecystectomy showed the mortality was 10%; very high. In looking over the statistics of many operators, not necessarily the greatest surgeons in the world, we find that the average mortality in cholecystectomy is from 3 to 4%. In my own personal experience, with a large series of unselected cases, the mortality is little over 3%.

Dr. Lyon speaks of patients previously operated upon without any relief. There is a certain percentage of morbidity following cholecystectomy. This is particularly true of patients who were operated upon for supposed gall-stones and at operation the only pathology found was either a thickened gall-bladder or adhesions between the gall-bladder and neighboring structures. The diagnosis of cholecystitis is made at the operating table and the gall-bladder removed. A percentage of these patients yield the morbidity of which he spoke, simply because there was some other pathology in the abdomen which was overlooked at the time of operation. In clear-cut cases of gall-bladder disease submitted to operation, the incidence of post-operative morbidity is very small. My main contention is this: If biliary drainage were definitely standardized so that it could be applied scientifically in properly selected cases, with definite indications for that sort of treatment, and not be made a means in the hands of a certain number of men who use it as a panacea for all sorts of gall-bladder or bile duct infections, then we could probably understand each other a little better.

If those surgeons who have an extensive experience in gall-bladder surgery would tell their story, citing incidents where biliary drainage was used for a considerable time for all sorts of conditions, such as gastric ulcers, clear-cut cases of gall-stones, chronic appendicitis, obstructive jaundice due to common duct stones or carcinoma, then the tables would be turned the other way. As soon as some doctors stop passing tubes into patients' stomachs, irrespective as to what the indications are, and confine their biliary drainage to those rare cases where distinct benefit may be derived from such treatment, this method will assume a definite place as a therapeutic means for certain medical conditions.

*Dr. J. Polevski (Newark):* I should like to ask

Dr. Lyon his opinion upon a certain phase in the dietary treatment in gall-bladder disease.

Physicians, generally, interdict the use of fat as part of the diet as soon as a diagnosis of cholecystitis is made. The idea, of course, is that fat, as a great cholesterolin producer, will, naturally, favor formation of gall-stones.

What about the cholagogue action of fat? It has been pretty well established that a fatty meal will cause emptying of the gall-bladder within 1 hour. Do we not serve the interest of the patient best by allowing a fair amount of fat in the diet in a case of cholecystitis. Of course, nobody will think of allowing fat in the case of complete obstruction of bile flow in which case, because of the absence of bile in the intestine, digestion of fat will naturally be far from perfect, in fact, none may take place, thus permitting non-split fat in the stools, and irritation of the gastro-intestinal tract.

There is another question which I have not been able to settle in my own mind in all these years that the Lyon-Meltzer method has been in vogue. If we grant the tremendous bile draining power of the fatty meal, why resort, for therapeutic purposes, to use of the duodenal tube and magnesium sulphate which is generally inserted twice weekly, while the biliary drainage *per via naturalis* can be resorted to by the patient 3 times a day without any discomfort and rather with much relish to himself? Also, has there been a comparative study of the quantitative results of biliary drainage by the 2 last mentioned methods?

*Dr. B. B. Vincent Lyon:* I was very much interested in Dr. Lathrope's discussion and I think it is extremely timely, and his suggestion deserves to be taken up by larger numbers of men in general practice. I feel sure that they can, if they will record and then publish their findings, add a great deal to the efforts of men who are puzzling themselves with research. The material at their disposal is usually much less than is available in general practice.

I am particularly interested in Dr. Lathrope's discussion of uric acid. I think that is quite pertinent. You will find in reported papers of Mann, of the Mayo Clinic, on his experimental work on animals, that he finds the liver, so far as he has been able to judge it experimentally, is the only organ capable of destroying uric acid. The liver is also, to a large extent, the sole producer of urea. Mann proposed a functional test of the liver in regard to studying uric acid destruction that, so far as I know, has not been taken advantage of by any worker. I think Dr. Lathrope would be interested in a paragraph or two in Mann's papers dealing with this subject.

Concerning what Dr. Lathrope said about pernicious anemia, there is unquestionably some liver deficiency. There is a tendency now to group pernicious anemia among the recognized deficiency diseases. Despite the brilliant results from the use of liver extract, most patients with grade 3 or 4 pernicious anemia have to continue the use of liver extract indefinitely. Before liver extracts came into vogue, we had been impressed by the recovery of a number of pernicious anemics who reestablished blood volume and count after duodenal tube liver drainage as spectacularly as though they had had transfusions. We had collected a number of records of that sort but when the Murphy-Minot plan appeared, it seemed far simpler to use liver extract rather than duodenal tubes. I have a feeling, however, that if duodenal tube drainage were combined with liver extract, it

might appear that some cases that are now relapsing after liver extract is withdrawn might possibly have longer remissions. I would like to leave that as a thought for those men who want to work along that line.

This suggestion also serves as a connecting link with the second gentleman who discussed this paper by asking a question in reference to diabetes. Beginning some 19 years ago, I have been impressed by the large number of diabetics who give an antecedent history of catarrhal jaundice. That struck me as interesting because of the fact that with obstructive jaundice in the large majority of cases the external pancreatic duct is obstructed as well as the common duct. That means back pressure on both the liver and pancreatic cells. I tried to imagine, in patients who subsequently developed diabetes, that the intra-pancreatic increased tension might conceivably act more vigorously on the islands of Langerhans than on other portions of the pancreas, and I took the problem to Dr. Joslin, in Boston, with the object of ascertaining whether antecedent catarrhal jaundice was more frequent in diabetes than we had been led to expect. Without going over his records he was doubtful of my point of view, but I asked him if he would send us a case of a young diabetic whom he had been able to bring to the highest point of health possible with his dietetic method. He sent up a young gentleman and whereas he was "spilling over" in the urine on a 1200 calories diet, we were able to carry him up to a 2000 calories diet without glycosuria. The hypothesis there ran along these lines: If in draining material from the duodenum, we are tapping the liver, we are also recovering fluid from the stomach, from the duodenum, and from the pancreas. Assuming that in this biliary mixture there is a certain proportion of pancreatic external secretion, we then must assume that we are removing from the body a certain amount of amylase in each drainage. Could it be that by removing a certain amount of amylase there were less amylase units left for the pancreas to use in the conversion of carbohydrates into sugar? Was that one reason why in some of these diabetic cases we could further improve the clinical picture than could be done exclusively by dietetics or the accustomed diabetic management?

The next speaker referred to galactose and levulose tests. I, personally, believe that they are both important. I believe that, at the present time, as Dr. Lathrope has already stated, there are not enough tests to measure all of the functions of the liver. But the modified Spence-Brett method we have found more helpful because it eliminates the renal threshold not accomplished by the earlier levulose tests. The galactose method is very well spoken of in Europe. Our experience with it has not been as great as I would like but at the present time we believe that the galactose test does furnish some information in regard to the glycolytic function of the liver.

Dr. Danzis has requested me to furnish more definite mortality statistics. I find that surgeons are generally disturbed with the publication of my own statistics and consider them abnormally high. In 1923, I reviewed a series of 23,723 cases of gall-bladder and biliary tract surgery. I excluded from consideration all series of cases that were less than 200 and those appearing from clinics which could not be considered Class A. This I did in fairness to the surgeons, because it is well known that the larger the series in unselected cases and the higher the surgical skill, the lower the mortality rate becomes. In the aggregate these

cases reviewed were collected from the published reports of 6 European clinics which supplied 1939 such operations with a mortality average of 10.9%, whereas 5 American clinics supplied 21,784 such operative cases with an average mortality of 5.8%. This, therefore, represented a combined average for these 11 clinics of 8.35%. Furthermore, it should be stated that 4 of the 5 American clinics supplied 4804 cases with an average mortality of 6.69%, whereas the fifth American clinic alone furnished 16,908 of such operative cases with a mortality of only 2.6%. The nearly 17,000 cases just mentioned will be found reported in a paper by Dr. Mayo in the British Lancet of 1922 or 1923. It gives one a profound impression of the enormous number of cases this clinic has so capably handled, due to developing master surgeons and good team work. However, this series with its mortality rate of only 2.6% and including all cases of gall-tract disease from very early to very late stages, covered a 30 year period from 1894 to 1923. This attracted my attention, since the mortality rate was so much lower than had been published from other Class A clinics. I then turned to the 1924 volume of "Collected Papers of the Mayo Clinics" to secure the statistics of the final year of the 30 year period. They had done something over 1200 cases in that 1 year with a mortality rate of 2.5%. In other words, there was a difference of only 0.1% over a 30 year period, a large part of it representing an experimental surgical era in this subject, compared with their accomplishments in 1923. This seemed unusual. I then turned to the Johns Hopkins Hospital reports over the same length of time, from 1894 to 1923. By comparison with the Mayo Clinic they had performed an amazingly small number of biliary tract operations. But over the same 30 year period the mortality rate was 9%, whereas during 1923 they had operated upon something over 200 patients with less than 2% mortality. That seemed to me much more consistent with statistical expectancy.

Because I have been very greatly interested in the surgery of this subject, I have made great effort to select patients suitable for surgery and have advised them to select thoroughly qualified surgeons. All of the cases I have reported have been either operated on by master surgeons or unquestionably Class A surgeons. My own mortality figures, nevertheless, have been as I stated, approximately 10% for primary operation. I am quite satisfied that if all the surgeons throughout the country who are now operating on biliary tract disease as beginners, as junior apprentices, or even as Class B surgeons, would publish their statistics, the mortality rates would be even higher than they are now quoted. As some one truly paraphrased it—"published statistics of themselves do not lie, but the whole truth is concerned with the statistics that are not published".

In this connection, I do not wish to be misunderstood. I was trained under the influence of Dr. John B. Deaver; I was a House Resident in his hospital for 2¼ years. I have had opportunities for contacts with very fine surgeons. I have absolutely no quarrel with the surgeons, but rather a high regard for their fine accomplishments. I am simply stating my belief that despite the fact that 10 years have elapsed the duodenal tube, when properly used, is still under-rated as a very useful part of the equipment of a doctor, whether he is an internist or whether he is a surgeon. I believe that if equal attention were paid to non-operative technic, as is paid to operating room technic, some of the abuses of the duodenal tube,



that I know to be taking place, would be very much less frequent.

The last doctor spoke about dietetics in gall-bladder disease. I thought that in my paper I had made my position plain. In Grades 2, 3, or 4 cholecystitis, where there is reason to believe that the gall-bladder is definitely infected in its wall, I believe the gall-bladder should come out, and should come out early, in order to save the liver and other parts of the biliary tract system from future damage. I am quite sure that there is often too much procrastination on the part of the physician. On the other hand, for patients in whom a Graham test may show some moderate disturbance in function and in whom duodenal tube drainage study indicates that there is a Grade 1 or Grade 2 cholecystitis, undoubtedly dietetics should be used. Here the fat-full meal should be favored because it is now well established that the fat foods are the best physiologically normal evacuators of the gall-bladder. My contention is, that despite the readily accessible means that we all have, external bile drainage is of very great importance in the way of prevention of later difficulties, if you will practice it in addition to the dietetics. Otherwise, you are draining, let us say, a gall-bladder or a liver with a fat diet and if there is loss of detoxifying power in the liver, if there is loss in bacteriacid power in the liver, if there is an infection in the mucous membrane of the gall-bladder, you are draining that into the duodenal tract and into the intestinal tract, when you might just as well drain it outside. It is not difficult.

In grade 3 or 4 cholecystitis with marked inflammation, the objection to the fat-full diet is that it provokes pain. I don't mind throwing the patient into a little pain in the interest of trying to get him well if possible without surgery, but my feeling is that if it throws him into pain it is a surgical case and not one to be treated by either duodenal tube or by fat-full diet. If there are small stones in that gall-bladder, I then believe that a fat-full diet is totally wrong. It throws too many of these patients into a biliary colic and very often impacts a stone in the cystic duct that makes the surgery much more difficult than if it had been allowed to remain in the gall-bladder. If the gall-bladder has been removed, fat-full foods should be reduced. It does not require as much fat under those conditions to give adequate stimulation to the liver, and in those cases I use a fat-reduced diet and usually a protein-low diet if the urea nitrogen and the non-protein nitrogen in the blood are elevated.

I very greatly hope that the position I have taken will not be misconstrued. My argument is this: There is a certain group of cases that is definitely surgical and nothing else. There is another group that is definitely medical, in my judgment, and nothing else. In between, is a large group that might fall one way or the other. I think my personal experience has taught me that patients who belong to the surgical type will go through their operative procedure much better, with much less immediate postoperative discomfort, if they are given a short period of preparation of the duodenum and of the liver before operation by external bile drainage and all of the internal cleansing that comes with flushing the duodenum, sometimes with hypertonic solutions, sometimes with others. It has taught me that after an operation has been done it is bad practice for the surgeon to say to his patient—"You can go out and do about as you wish, with prudence: I have cut out your disease, you can go ahead and

eat reasonably"—without any further postoperative advice to the patient, and without himself knowing what smoldering infection is left behind in the liver or ducts. In most instances he has not "cut out the disease", but has wisely taken the first step, which should then be followed up by more adequate postoperative care. The case reports in this paper should indicate the wisdom of a change in our methods.

Finally, I believe it should be the responsible duty of the surgeon, within 6 to 10 weeks after such a cholecystectomy, to see that a possible residual hepatitis or cholangitis is properly appraised by the duodenal tube. If you find abnormal bile drainage from the liver or ducts, if you find abnormal microscopy, if you find abnormal bacteriology, that is the time to take steps to prevent a postoperative relapse, instead of waiting until the patient comes back complaining, with symptoms of still existent liver disease. I should think that the surgeons would find it of very great advantage to themselves to properly add to their surgical machinery a qualified man on their own staff or get in liaison with a properly qualified member of the medical staff to develop that kind of team work. That is all the—I don't like to use the word—"quarrel" that I have with the surgeons. I do not misunderstand them, and I am trying to make my own position as clear as I can.

## NEW METHOD OF OUTLINING THE HEART, ITS CHAMBERS AND GREAT VESSELS

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The purpose of this paper is to present the technic of a method of auscultatory percussion by which it is possible to outline definitely and with marked exactitude, the heart, the heart cavities, the aortic arch and the great vessels, and to call attention to the wide usefulness of this method in the conduct of a physical examination.

The pioneer in mediate percussion was Piorry, of Poitiers, France, who was also the inventor of the pleximeter, but ever since Auenbrugger's work was reversed by Corvisart, in 1808, percussion has been an important adjunct to methods of physical examination. Not until modern times, however, did percussion become a diagnostic procedure, and it was to enhance such use and to demonstrate its value that the procedure here to be outlined was evolved. Its novelty

does not depend upon the use of auscultatory percussion but upon the manner in which this procedure is utilized and interpreted, for an understanding of which some preliminary discussion of the principles underlying percussion is necessary.

The literature concerning percussion as a means of physical diagnosis is astonishingly restricted and it would seem that those who have studied it in the past had decided that no further possibilities of development existed. There is a tendency, therefore, to regard it as a procedure of limited value to the diagnostician. The underlying principles of auscultatory percussion may be summarized as follows: The problem is one of sound transmission and, whether applied to animate or inanimate structures, there are certain fundamental laws which always hold true. In the first place, the ease with which sound travels through different mediums varies necessarily with the variations in density and elasticity of the medium. A stroke of given force, which gives rise to audible vibrations in a medium of one density, will fail to produce audible vibrations in a medium of lesser density. Gas, for example, conducts sound far less readily than liquid, and a porous medium composed of solid and gas will not conduct sound as readily as a medium composed of solid and liquid.

In the second place, if sound is produced over a medium of a certain density and elasticity, it will be more readily conducted through that medium than through one of a different density and elasticity, even though the 2 mediums are in apposition. Application of these principles makes it possible to map out, by auscultatory percussion, the size, shape and position of the heart with its great vessels, and also the chambers within the heart. The density of the heart is such that a very light stroke, the bell of the stethoscope being over some portion of the organ, gives rise to audible vibrations; while, owing to its lesser density, the vibrations in the adjacent lung are not audible. These facts make it possible so to gauge the percussion stroke by any pleximeter (finger or instrument) that the first audible vibrations

are heard when the pleximeter reaches the border of the heart.

Because of the second principle above stated, it is possible, by placing the bell of the stethoscope over various points on the heart and great vessels, to map out not only the borders of the heart and great vessels but also the borders of the chambers within the heart. It is necessary, of course, *to vary the force of the percussion stroke in accordance with the depth of the structure to be outlined.*

*The exact technic:* In outlining the borders of the heart, cardiac chambers and great vessels, I use the Ford stethoscope and have found that more accurate results are obtained in outlining the more superficial structures by substituting a piece of rubber tubing for the bell of the stethoscope. In this outline of the technic I shall, therefore, specify the points where the bell of the stethoscope is most satisfactory and those where the rubber tubing is used to best advantage.

The bell of the stethoscope is first placed just below the tip of the xiphoid process and to the right of the midline (Point 1 on the diagram). Then, beginning on the lower thoracic wall and percussing from the sides toward the sternum, using a gentle percussion stroke, a definite increase in volume of sound is heard when the percussing finger reaches a point which corresponds to the surface markings of the inferior vena cava. The course of this vessel can be followed to a point beneath the right border of the sternum at the level of the third interspace, at which point the vena cava enters the right auricle.

Then, *substituting a piece of  $\frac{1}{4}$  in. rubber tubing for the bell of the stethoscope*, and placing the tubing at point 2 on the diagram (the right border of the sternum at the level of the third interspace), and using a very gentle percussion stroke, it is possible to percuss out 2 areas which correspond to the right auricle and right ventricle. Owing to greater depth of the ventricle, it is necessary to use a somewhat heavier stroke when percussing its borders. When the percussion stroke is properly gauged, a very definite increase in the volume of sound is heard as the borders of the cardiac chambers are reached.

The tubing of the stethoscope is again sub-



stituted for the bell and moved to point 3 on the diagram (the third interspace just to the left of the sternum). From this point, by the same method used in outlining the borders of the right auricle and ventricle, it is possible to outline the left auricle and ventricle, keeping in mind the fact that a heavier percussion stroke is necessary in outlining a deeper structure, than a more superficial one.

Without changing the point of contact for the stethoscope, but using the bell instead of the tubing, the ascending, transverse and descending rami of the arch of the aorta may be outlined, as shown in the diagram. If the stethoscope bell is then placed at point 4 on the diagram (below the xiphoid process and just to the left of the midline), the descending aorta may be traced from below upward; and this is found to coincide accurately with the descending limb of the arch as determined from point 3. As that point overlies the interventricular septum, the outer borders of the heart can be outlined by the same technic. The cardiac chambers previously outlined are found to lie within these borders.

I do not presume to state that the outline of structures obtained by this technic corresponds absolutely with the true anatomic outline of the underlying structures. There is bound to be a certain amount of distortion caused by differences in structure of tissues lying between the bell of the stethoscope and the structure which is being outlined. Also, it must be borne in mind that sound travels outward in all directions and there will, therefore, be more or less magnification of the size of underlying structures, varying with the depth of the structure whose outline is being determined. A deeper structure will give a larger outline by both auscultatory and mediate percussion than a structure of equal size which is more superficially situated. However, inasmuch as the findings have not only been constant, but have been repeatedly checked by postmortem and x-ray pictures, I feel certain that a definite ratio can be established between the size and contour of underlying structures and their surface outlines, as obtained by auscultatory percussion.

The present communication concerns the method itself, its technic and its application to

study of the cardiovascular system of the normal individual. Its application to other viscera and to abnormal conditions will be presented in a future communication in which its value and accuracy have been demonstrated in such conditions as aortic aneurysm, mediastinal tumors, dilatation of the cardiac chambers, and, in fact, in any condition in which the normal contour of viscera is disturbed.

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### UTERINE HEMORRHAGES RADIOLOGICALLY CONSIDERED\*

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Surgeons, internists and radiologists are frequently consulted by or concerning patients suffering from uterine hemorrhage. One may meet such a problem in his office or in a hospital. A great majority of those present this evening have seen such patients recently or may tomorrow. I have been frequently asked to give an opinion as to whether this or that patient would be benefited by radiation. I have been stopped in the hospital corridor; symptoms have been related to me rapidly, and I was expected to say "yes" or "no". Decision as to how such patients should be treated ought not be reached so hurriedly by any of us. Uterine hemorrhage is a condition which, in the vast majority of instances, can be corrected, but the measure to be adopted should be determined always upon the basis of conditions existing in the particular case under observation and that can only be decided after careful examination. Sometimes the examination must include not only the history taking and bimanual physical examination, but also certain laboratory and even x-ray studies; and the x-ray studies may include injection of the uterus with lipiodol and performance of pneumoperitoneum, so that presence or absence of adnexal pathology can be determined without opening the abdomen. All will agree that no treatment should be instituted, for any condition, without as thor-

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\*(Read before the Monmouth County Medical Society, April 29, 1931.)

ough an examination as possible, and yet we are all prone, in some cases at least, to ignore this desideratum in the concrete while agreeing to it in the abstract. I have, for example, found fairly well advanced carcinoma of the cervix in a number of women who had been under medical supervision for months, the supervision being that of men I have considered competent, and still do, but who in the particular case in question had not made a pelvic examination. They have not been ignorant, since invariably the reply to my question, as to whether the patient has had a vaginal examination, has been in the negative. If they had made even the most cursory vaginal examination they would have detected the true cause of the hemorrhage.

For the purposes of this paper, I shall divide our patients into age periods, such as, 15 to 30, 30 to 50, and over 50. Certain pathologic conditions which give rise to uterine hemorrhage are more common in some age periods than in others. In the first age period, from 15 to 30, while cancer is not unknown and, apparently, is now being seen more frequently than ever before, we shall for the moment defer its discussion. We shall, therefore, first consider ovarian dysfunction, chronic endometritis, anemia, constitutional dyscrasia, glandular distrophy and pelvic inflammation. All of the conditions mentioned, except ovarian dysfunction, chronic endometritis and pelvic inflammation, are exclusively in the field of the internist, and should be passed upon by him before the patient consults a surgeon or radiologist.

Among systemic conditions that may underlie excessive menstruation are hemorrhagic diathesis, scurvy, malaria, lead poisoning and acute infectious diseases such as scarlet fever, diphtheria and typhoid. Menorrhagia associated with such causes is often difficult to treat because, as Croon says, they interact in such a way as to form a vicious circle. Chronic mental depression, hysteria, sedentary habits and residence in high altitudes or in the tropics, dispose to menorrhagia. In some cases anemia, although usually a cause of amenorrhea, may induce uterine hemorrhage; explained by low specific gravity and dimin-

ished coagulability of the blood. Pelvic examination, made if necessary under anesthesia in young women, should be employed to exclude malposition of the uterus, ovarian cysts, and pelvic inflammations like ovaritis, salpingitis, parametritis and perimetritis. Ovarian dysfunction and chronic endometritis are often treated by curettage, and many such patients have return of symptoms in from 1 to 3 months. The same is also true of uterine myomas, where if a small amount of radium, properly filtered, had been inserted immediately after the curettage, and left sufficiently long to give a dose of 200-500 mgm. hours, a much greater percentage of cure might have been obtained. The ovaries when so treated are only temporarily affected; amenorrhea being present generally for only a few months following treatment; but even this short period of rest and non-function often enables nature to establish a normal cycle in cases of dysfunction, while in cases of chronic endometritis with hypertrophic endometrium the over-proliferation of cells is stopped. Roentgen ray therapy is not so well adapted as radium in the treatment of chronic endometritis, inasmuch as a far greater dosage to the pelvis is necessary in order that sufficient radiation may be given to the hemorrhagic endometrium. Some investigators report excellent results in the treatment of dysfunction, or painful and prolonged menstruation, from small doses of x-rays over the ovaries.

In the age period from 30 to 50, we have to consider principally uterine fibromyomas, myopathic premenopausal hemorrhage, and cancer of the cervix or body of the uterus. The proper treatment of fibromyoma has long been a subject of controversy between those advocating surgical procedure and those advising some form of radiation; a controversy that reminds me of the fable of "the bull-dog on the banks and the bull-frog in the pool". There are enough of these patients and enough variation in case histories to satisfy every one concerned, and the subject should be properly studied for classification so that each patient shall receive the best treatment for her particular condition. In women under 40 years of age, particularly those who



are still in the childbearing period, where the fibroid does not involve the entire uterus and there is possibility of saving the uterus for its normal purposes, a myomectomy should be performed. In any case, where there is pelvic inflammation or other gynecologic complication, radiation should be avoided; because latent pelvic sepsis may be lighted up. However, recent developments require qualification of the last statement, in that some chronic pus-tubes have benefited from application of x-rays in small doses, and ovarian cysts have been known to degenerate as the result of such radiation. The statement has been made that because of the possibility of ovarian cysts or other adnexal complications being present but not recognized, surgical treatment is to be preferred in every case of fibromyoma. So far as cysts are concerned, if the usual physical examination cannot definitely rule out their presence, we have today a combined lipiodol and pneumoperitoneum x-ray examination which can be depended upon to settle that question. So far as concerns infection which cannot be recognized clinically, Dr. Francis Carter Wood states: "In a series of 150 fibromyomas recorded at St. Luke's Hospital, evidence of chronic process was found in only 41; no example of an acute process was seen in any; and such chronic processes of low degree, as are only found microscopically, are frequently associated with small cysts of the ovaries, but said lesions do not give rise to symptoms that justify laparotomy." The statement is often made that surgery is the better treatment for all fibromyomas because cancer of the fundus may complicate any given case, and if such a patient is treated first by radiation valuable time will be lost. The frequency of such a complication in the cases reviewed by Wood is 0.5%. If to these cases of fundus cancer we add cases of sarcomatous degeneration of a fibroid, we will have a little more than 1% of the total number of fibroids considered, but that percentage of malignant fundal involvement, if allowed to go unrecognized to a fatal end, would still be less than the minimal operative mortality, which is 1.5%. However, a number of these cases will be detected in time even if radiation therapy is tried. If intra-uterine

radium treatment is to be given, curettage should be done before insertion of the radium, as that procedure will enable us to detect some of the cancerous conditions. If hemorrhage continues after a few x-ray treatments, the therapist should suspect a complicating lesion, because, as a rule, unless there is considerable anemia or other blood dyscrasia, hemorrhage should be checked fairly early in the treatment. Surgeons have also contended that in young women complete removal of the uterus but leaving the ovaries intact is better therapy than radiation because ovarian hormones are retained. Some investigators report that in about 2 years after hysterectomy the ovaries cease to function and thus an artificial menopause results anyway. The menopause following radiation is seldom severe and might just as well take place at the time of treatment as 2 years later.

An intramural fibroid not larger than a 3 months' pregnancy is the ideal type for radiation therapy, and the patient is generally in better health subsequent to radiation than after an operation. Steinach, as you know, has advocated x-ray therapy for the ovaries as a method of rejuvenation comparable to that following ligation of the vas deferens in the male. I can personally state that a number of women have, after radiation therapy for either fibromyoma or carcinoma, reported a renewed sense of well-being which made them feel "years younger", and in many instances their general appearance has borne out the statement. Many women with fibromyomas have cardiac changes or cardiorenal disease which would increase the mortality rate if surgical measures were used; so, such patients, at least, should be sent for radiation therapy. Pedunculated, markedly irregular fibroid, or very large ones, are not ideal conditions for radiation, but even in such cases, when operation is contraindicated, radiation should be resorted to rather than risk life in a hysterectomy. Large, hard or necrotic fibroids, or those that are calcified, will not, of course, yield to radiation and should be removed surgically.

We consider Roentgen ray therapy preferable in ambulatory cases and for women who are thin or below average size. Radium

should be used on the obese, or for those actively hemorrhaging. In order to reach the uterus and ovaries in the obese patient, the tissues anterior and posterior to those organs must be radiated considerably, and it is possible to produce skin changes of the abdominal wall before sufficient radiation reaches the ovaries and uterus. As a rule, radium effect is noticed more quickly than that of x-rays and the accompanying curettage and packing will also help to stop bleeding. Sometimes the use of radium and x-rays together is necessary, as was done in some of my cases where the uterine canal was short and most of the radium was placed only in the cervix, where it was sufficient to stop immediate bleeding but a complete result was not obtained until further x-ray treatments were given. Where radium is used, a diagnostic curettage is possible and desirable so as to exclude fundal cancer, a condition which is not, as a rule, amenable to radiation and which is 80% curable by operation, while still confined to the corpus uteri. Some radiologists believe that even where patients are referred for Roentgen ray treatment of fibroids there should be a diagnostic curettage first. This is not entirely necessary, as we have already stated, because: (1) only a very small percentage of fibroids are complicated by cancer; (2) this condition does not advance particularly rapidly; and (3) it can be diagnosed fairly well by lack of response to Roentgen ray treatment; in other words, if the usual treatment for fibromyoma does not stop the hemorrhage, a fundal cancer is probably present. In properly selected cases, patients should be entirely relieved, safely and without hospitalization, loss of time, or impairment of the body as a whole, by x-ray therapy.

The same relief of symptoms can be obtained in the myopathic hemorrhage case with premenopausal symptoms, including psychosis, nervous and neurotic symptoms such as headache or nausea, by causing a complete menopause, and this without shock or hospitalization. There are certain other cases where an artificial menopause to stop uterine bleeding may be therapeutically indicated, where the uterine bleeding *per se* is not of any

great moment; as in cases of anemia, markedly prolonged clotting time, and as in a recent case where the uterine bleeding was not much above normal but the patient had also an ulcerative colitis producing at every menstrual period rather severe bleeding from the rectum. This patient has been given an artificial menopause without risk to her general health, with complete cessation of uterine bleeding, and with very infrequent and very slight rectal bleeding. There is another condition which may cause uterine hemorrhage during the child-bearing period and that is the formation of uterine moles, either the so-called fleshy mole or hydatidiform mole. Either condition is accompanied by some of the signs of pregnancy, rapid increase in size of the uterus together with hemorrhage, and by expulsion of characteristic material. These conditions should, of course, be ruled out before recommending radiation therapy.

We have now come to the subject of cancer of the cervix and of the fundus uteri. These conditions are frequently found in the age period between 30 and 50, of course, but more commonly near the upper limits of this period and after 50, where they are the most common cause of uterine bleeding. Concerning cancer of the cervix, the view is now widely held, and is approved by the American College of Surgeons, that radiation can accomplish all that surgery would in the first stage and more than surgery can in the other stages. Most cancers of the cervix are epidermoid in type; which accounts for the large percentage of favorable reactions to radiation. The adenoma type of cancer is often quite resistant. It is rather fortunate that the more malignant types, here as elsewhere, are radio-sensitive. Cancer of the cervix is best treated by the combined method; i.e. radium within the cervix and uterus, followed by high voltage, heavily filtered x-rays externally. When cancer of the cervix is to be treated surgically, only the most radical form of surgical procedure should be considered; and this would certainly be termed a *major operation* both from the standpoint of the risk involved and the financial outlay necessary. Modern technique calls for considerable attention by the radiation therapist in addition to the insertion



of elementary radium. Interstitial radiation by gold implants may be necessary and these are in themselves quite costly, and high voltage therapy should always follow the radium treatment if at all possible. These various treatments take time and require the use of expensive equipment, to say nothing of the skill required. Interstitial radiation is especially expensive for a person of moderate means, in a small community, and often the cost of gold implants is as much as a moderate operation fee. Fortunately, unlike cancer in other parts of the body, cancer of the cervix, in the first and often in the second stage, can many times be absolutely eradicated by proper radiation therapy.

Cancer of the fundus of the uterus is always a surgical disease. Radiation helps but little, and since, fortunately, fundus cancer may exist for some time without metastasis, an absolute cure can often be obtained by hysterectomy. The question is sometimes raised as to whether the operation should be a supravaginal or a complete hysterectomy. If the cervix is to be left, it should not be ignored. I have treated several patients for cancer of the cervix which developed subsequent to supravaginal hysterectomy. If the cervix is to be left because supravaginal hysterectomy is an easier surgical procedure, is less shock to the patient, and leaves a better anatomic floor to the pelvis; then, I believe that the cervix should be radiated either before or after operation, and whether or not it is radiated the patient should be instructed to return at intervals for examination for possible cancerous involvement just as though she had not had an operation.

RESUME

The purpose of this paper has been to draw attention to the fact that a great many uterine hemorrhages are amenable to radiation; many of them without hospitalization and without any operative procedure at all. It is not necessary to avoid radiation therapy nowadays, for fear that some intrapelvic pathology may be overlooked clinically that would be recognized at the time of a laparotomy. For benign uterine bleeding in patients around the menopause age, not complicated by cysts or

acute infectious processes, radiation is the method of choice, by reason of low mortality incident thereto, because the patient can remain ambulatory, and because, as a rule, the expenses incident thereto are less than combined hospital and surgical fees. Complications that cannot be recognized clinically are not very frequent.

Where constitutional conditions make operation hazardous, radiation therapy is the first consideration, even with large or irregular, pedunculated tumors.

In young women, where myomectomy is possible, radiation is contraindicated. Where hysterectomy is necessary, radiation is of equal value, and Wood says we do not need to fear malignant degeneration. In cervical cancer radiation therapy is at all stages preferable, and generally the cervix should not be removed. Where fundal cancer is diagnosed or suspected, hysterectomy is indicated.

It should be recognized by surgeons, internists and radiologists that there are many cases of uterine hemorrhage with other than local causes, and that the highest percentage of good results will be obtained where the patient has a thorough clinical study before any method of treatment is adopted, and where there is a friendly sort of discussion and consultation among the medical advisers before any line of therapy is adopted.

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**CARDIAC FAILURE OF THE CONGESTIVE TYPE**

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Increase in the cardiac death rate has occasioned grave concern in medical circles. The possible causes of this increase may be the lengthened span of human life; strain of our modern complex living, with its frequent emotional upsets; the more careful keeping of records; or, perhaps it may be due to an actual increase in diseases of the heart. Any consideration, therefore, of cardiac failure, its causes, and plans for relief when it has occurred, becomes to each of us matter for care-

ful study. It is to be hoped that in the discussion which may follow reading of these papers, some facts will be developed which may be helpful and encouraging to those of us who have to do with the care of these distressing and difficult cases.

Naturally, there are 2 questions which arise in a discussion of this type: (1) just what is *cardiac failure*; (2) what are its causes?

Cardiac failure is well described by Mackenzie as "a condition in which the heart is unable to maintain an efficient circulation, when called upon to meet the efforts necessary to the daily life of the individual". What are the causes of cardiac failure, is a question which has not been adequately answered. It is very difficult, indeed, to understand why, in rheumatic disease of the heart and in hypertensive heart disease, an efficient circulation can be maintained for so long a period without evidence of failure and then, with no apparent change in the lesion present, nor alteration in the rhythm or change in elevation of the blood pressure, cardiac failure begins and progresses to a fatal termination. In obstructive lesions of the coronary artery, with an area of local death in the heart wall, inability of the heart to maintain an efficient circulation can be more easily understood. Where failure occurs without any change in the anatomic lesion present, manifestly, it must result from disturbed function, and the most common disturbance of function causing failure is, in my opinion, fatigue. This is illustrated by a patient seen in 1929. A strong, robust girl of 15 years, weighing 135 lb., was suddenly seized with an attack of rapid heart, and a ventricular rate of 230. There was no rheumatic history other than that she had frequent attacks of tonsillitis. Pressure on the vagus in the neck, or pressure on the eyeballs, produced no change in the rate; there was no arrhythmia. The electrocardiogram showed tachycardia of unknown origin. There was no fever. This high pulse rate was kept up day and night, continuously, for a period of 4 weeks, at the end of which time the patient began to show symptoms of congestive failure, i.e. edema of the extremities, engorgement of the veins in the neck, enlargement of the liver

and albumin in her urine. The heart rate then suddenly returned to normal. With this sudden fall of rate and consequent slowing of the circulation, she developed a thrombophlebitis of the veins in her left arm, with edema. The next day there occurred a right hemiplegia, probably as the result of a thrombus in the left auricular appendix. She eventually made a complete recovery. The point in the story is, that it took 4 weeks of this extreme rate before fatigue was sufficient to cause beginning failure.

Again, a doctor recently seen, aged 58, gave a history that for 20 years he had experienced attacks of rapid heart beginning suddenly and terminating abruptly; the rhythm was always irregular (fibrillation), rate 140; attacks were always of short duration and inconvenienced him very little; he would go about his work and in a short while recover. One day he had an attack which continued 4 days, when congestive failure began, and before the day ended was very severe; he could not lie down; edema of the extremities was present; cyanosis; enlargement of the liver; râles in his chest; albumin and casts in his urine. Fortunately, during the night his heart rate suddenly returned to normal, and all symptoms rapidly cleared up.

In the first case, of a young individual, it took 4 weeks to wear the heart down, while in the second case, an older person, it took only 4 days.

Just what occurs in the heart muscle, the seat of fatigue, has not as yet been determined. Gellhorn's recent work on muscle fatigue attributes it to a loss of calcium in the muscle substance. In some experiments he has abolished muscle fatigue, at least temporarily, by giving calcium chloride. Other biochemists believe that fatigue is due to a loss of potassium, and still others believe it due to depletion of glycogen in the muscle. It has been proved that the giving of potassium will relieve the heart in failure for a period, and we all know that intravenous injection of glucose will often help, when all other cardiac measures have failed, in a patient with congestive failure. Again, it is well known that in cases of diabetes where the blood sugar is



high, much harm can be done to the heart when the blood sugar is reduced too low by insulin.

The secondary causes of cardiac failure are many. They may be divided into 2 classes, intrinsic and extrinsic.

Intrinsic: (1) Advancing rheumatic disease. (2) Arteriosclerosis with or without hypertension. (3) Lues. (4) Infections. (5) Fatty infiltration and degeneration.

Extrinsic: (1) Thyrotoxicosis. (2) Errors of diet, excess of fluids and sodium chloride. (3) Alcohol. (4) Over-exertion and over-physical development. (5) Psychic and emotional disturbances.

There are 3 clinical types of cardiac failure: (1) Congestive; (2) anginal; (3) the type due to bacterial infection of the heart valves. The first 2 types may be interrelated; that is, in a patient with cardiac failure of the anginal type, the pain may disappear and the patient end his life in congestive failure, or a patient in congestive failure may end his life suddenly from occlusion of the coronary artery.

For the sake of convenience and clearness, congestive failure may be divided into: (1) Failure of the right heart; (2) of the left heart; (3) of the auricles.

The purest example of right heart failure is seen in pulmonary embolism, or may be encountered in pneumonia or in hypertension where pulmonary edema develops suddenly, with the left heart acting normally and the pulse good. I once saw a patient develop rapid and fatal pulmonary edema while the chest was being aspirated in pleurisy with effusion; the radial pulse remained fair until the patient ceased to breathe. Right heart failure is also seen commonly in asthma, chronic bronchitis and bronchiectasis, where the symptoms are markedly exaggerated by development of right heart weakness. It is also seen in arteriosclerosis of the pulmonary artery; the so-called "black cardiacs". It is common in mitral stenosis.

The commonest causes producing failure of the left heart are, probably, rheumatic heart disease and arteriosclerosis, with or without hypertension, lues, and sometimes thyrotoxicosis.

Failure of the auricles—auricular fibrillation—is without question the commonest mechanism causing congestive failure. Auricular fibrillation occurs most frequently in (1) rheumatic heart disease; (2) senile or hypertensive form of arteriosclerosis; (3) thyrotoxicosis; (4) paroxysmal tachycardia with an irregular rhythm. In auricular fibrillation, because of the high rate, the ventricles do not fill up with each contraction, congestive failure sets in early, and the blood becomes dammed back on the venous side.

Probably the earliest symptom of congestive failure is dyspnea. This may be of 3 types: (1) On exertion. (2) Irregular breathing of the Cheyne-Stokes' type. This is more apt to occur in older people with arterial changes, with or without hypertension, and may last for a long time, disappearing when condition of the circulation improves and reappearing when the condition becomes worse. In 1 case under treatment, breathing of the Cheyne-Stokes' type persisted, off and on, for a period of 1 year. (3) Dyspnea in older persons manifested by the patients suddenly being aroused at night with a suffocated feeling, being compelled to sit up for a while to get his breath, then being able to lie down again and go to sleep.

Sometimes dyspnea is the only symptom for a long time; gradually increasing. An old lady, seen occasionally, has not been able for a period of 1 year to walk across the room without becoming extremely breathless. This type is more apt to occur in failure of the right heart. Sooner or later, in right heart failure, pulmonary edema, or in mitral stenotic cases, pulmonary hemorrhage may develop; or, in the predominantly left heart cases, edema of the feet or legs may begin. Some hypertensive patients have frequently repeated attacks of pulmonary edema, and between attacks the heart function seems to be good. I have a lady under my care, with marked hypertension, who in 4 years has had many attacks of pulmonary edema, usually brought on by undue exertion. When she recovers from these attacks, each of which seems desperate, she goes along doing her house work fairly comfortably.

As a rule, however, breathlessness and

edema of the extremities progressively increase, the liver becomes enlarged and tender, albumin appears in the urine, the veins become engorged, fluid accumulates in the serous cavities, and those pitiful cases of "cardiac dropsy", familiar to all of us, occur. We find them sitting in a chair, cyanosed, breathing with great difficulty, the lower part of the body huge with massive edema, the skin of the legs broken, oozing fluid, a nuisance to themselves, a source of the gravest anxiety to their friends, and often a severe trial to the physician.

In congestive heart failure there are 2 things which must be considered; first, prevention, and second, treatment of the condition once it has occurred. It is along the lines of prevention that, in the future, the greatest advance must be made, and it is toward this end that research must be directed. At present our attempts are pitifully futile in preventing the underlying cause of most of our heart cases. If the rheumatic child is treated as well, as assiduously, and along the same lines as the tuberculous individual, much can be done toward preventing recurrences of rheumatic fever with its consequent and increasing heart damage. Removal of focuses of infection, prolonged rest, over-nutrition, fresh air and sunlight, are all advantageous. Unfortunately, some individuals seem peculiarly liable to rheumatic infections, and heredity has some influence. I recently saw a family where the mother and 3 daughters had recurrences of rheumatic fever and endocarditis. A cardiac child, in the interval between attacks of rheumatic fever, feels very well, and it is very difficult to convince the parents that the child has a disease which should be treated like a tuberculous case, with rest, forced feeding, fresh air and sunshine.

In the hypertensive case, because we know so little about the cause of hypertension, we can do little specifically. Certainly where hypertension has lasted for years little can be done toward a permanent reduction of blood pressure, because of the secondary changes which have occurred in the heart, blood vessels and kidneys. Yet much can be accomplished with rest and diet. I have a conviction that over-nutrition has much to do with

many cases of elevated blood pressure. I am sure that I have been able, in the obese hypertensive cases, to accomplish a great deal by rest and a gradual and permanent reduction of weight. In salt retention and nitrogen retention, salt and protein must be restricted, but in my hands, the greatest good has been attained in obese patients by reduction of the carbohydrate and water intake so as to bring about a gradual and permanent reduction of weight.

In luetic cases, prevention and prompt and efficient treatment when recognized should prevent cardiac failure developing. Unfortunately, the Wassermann test is frequently negative when the lesion is undoubtedly luetic. It is, therefore, safer to treat an aortic regurgitation which has developed rather quickly, in a man of 45 or 50, where the heart was known to be normal a year or two before, as a luetic aortitis, irrespective of what the Wassermann discloses; this is particularly so if there is no hypertension and the other vessels do not show atheromatous changes.

When congestive failure has occurred, fortunately we have a medical armamentarium which is extremely beneficial. Beginning and increasing dyspnea always requires less work and more rest; a rest of  $\frac{1}{2}$  to 1 hour after the midday meal and earlier hours for retiring at night. Swelling of the legs or feet demands a lessening of the fluid intake and a restriction of salt. Cardiac edema is fortunately the one type of edema which, if the kidney is intact, is amenable to treatment and readily responds to rest, limitation of fluid, and restriction of salt. For many years I have been using in the treatment of cardiac edema a diet which meets the necessary requirements of limited fluid and sodium chloride restriction. The diet is exclusively a fruit diet consisting of raw or cooked fruit of all kinds, including the fruit juices, the caloric value of which may be increased by the addition of sugar, either cane sugar, lactose or glucose. The only restriction is that not more than 1 qt. of liquid be taken in the 24 hours by the adult, proportionately less in the child; usually something is given every 2 hours. Such a diet is agreeable to most persons, furnishes carbohydrate to burn the body fat, and



combined with rest in bed will often without any other measure cause disappearance of the edema. After the edema has disappeared and the condition of the heart improved, the diet may be added to liberally; meat, fish, chicken, eggs, vegetables, milk, cereals and milk desserts. The fluids must still be reduced to 1 qt. each 24 hr., and the salt removed from the diet or greatly reduced. If this plan is followed it is rare for edema to recur, providing the kidney still retains the power to remove water from the body. With 1 patient who had been in bed for 1 year with massive edema, and draining continuously, the edema has never recurred. Another hypertensive case with fibrillation and massive edema has remained free for 5 years. I cite these 2 cases because in both instances the edema was very severe and of long duration before treatment was begun.

In cases of auricular fibrillation with a high rate, usually the above measures alone are not sufficient and some means must be found to slow the heart. It is here that digitalis is of profound value, but I am not altogether in sympathy with the plan of administering huge doses. I am sure that the danger of embolic accidents is increased by following that plan. Why, for instance, hit your patient with a therapeutic sledge, when gentle tapping with a jeweler's hammer will be equally effective, or why send a man to do a boy's job? Of course, I realize that where time is limited, and danger imminent, the therapeutic sledge hammer method may be necessary, as in the following case. Mr. M., aged 38, with mitral stenosis. After an attack of influenza, his heart suddenly went into fibrillation with such a high rate, 200, that in a very short while marked symptoms of pulmonary congestion and edema developed. He coughed continuously, raising blood all of the time; tracheal râles appeared; bloody froth at his lips and oozing from his mouth; cyanosis and lividity became extreme; his pulse running uncountable. His condition was desperate. I had in my bag some ampoules of bimuriate of quinin and urea which, after a little prayerful thought, were given intravenously. This was not difficult as the superficial veins were so

markedly engorged. Within 20 seconds there was a decided improvement; the rhythm became perfectly regular and the rate dropped to 140. The bleeding stopped, due, I take it, to the fact that because of the lower rate and regular rhythm the ventricle filled more completely and lessened the pulmonary congestion. Finally, the cough and bleeding stopped. I thought at the time that the fibrillation was converted into flutter, and polygraphic tracings seemed to bear out that conclusion. We then started him on digitalis, according to the regular plan advised by Eggleston, with the hope of improving his condition or possibly returning his heart to normal rhythm. He did improve, but his heart remained in fibrillation. The next morning his condition was much improved and the heart rate much slower. From then on his course was uneventful. After 3 years, he is working every day with his heart in fibrillation, the rate 80 to 90, and is very comfortable.

Again, Mr. G., aged 59, a hypertensive case of 10 years' duration, was suddenly seized with severe precordial distress, and pain radiation to the bend of the right elbow, while driving his car from office to home. In a short time this was relieved, but recurred when he walked from the garage to the house. He was put to bed immediately, on a low diet. Blood pressure was 200/110 but at the end of a week had fallen to 160/110, and during this week in bed he had no distress of any kind referable to his chest. He then, of his own volition, decided to get up and take a bath. After the bath he was seized with agonizing pain in his chest, substernal, with radiation to both arms and to the little and ring fingers of both hands. This pain continued despite hypodermics of morphia sulphate  $\frac{1}{4}$  gr. given every 4 hr. Amyl nitrite and nitroglycerin were without effect. In 24 hours his temperature rose to 102°, and on the following day a pericardial rub could be made out. At the end of the fourth day he still had the pain in his chest. In the evening of the fourth day his heart, which had previously been perfectly regular with a rate of 80, suddenly went into fibrillation with a rate of 190; he became cyanosed; his hands were cold and

clammy; and his radial pulse was hardly discernible. The situation, to my mind at least, was desperate. Picture a heart with the coronary artery occluded, an area of softening developing as the result of occlusion, and being whipped up to a rate of 190. Clearly something must be done to slow the heart rate as soon as possible. Teaspoonful doses of digalen were given every 6 hours for 3 doses. At that time the rate had fallen to 120 and the pulse was stronger. In 4-5 hours more the heart had returned to its normal rhythm with a ventricular rate of 70.

Such a reaction, with the astounding changes which occur in the body and in the heart, cannot help being accompanied with considerable hazard. Visualize, if you will, the changes in the heart which this sudden change of rate means. The normal heart, beating at a rate of 70, and allowing 2-4 oz. for the amount of blood thrown into the aorta with each contraction, moves through the body each 24 hours from 8-16 tons of blood. If the rate is doubled, the work of the heart is doubled, and if trebled the work of the heart is increased 3 times; modified somewhat by the fact that the rapidly acting heart does not fill up completely with blood at each contraction. When the heart is suddenly slowed, the marvel is that embolic accidents do not occur more frequently. That they do occur, is beyond the shadow of a doubt. Another danger which occurs with the too sudden slowing of circulation is the development of thrombophlebitis. We have had 3 of our clinic patients, in fibrillation, develop thrombophlebitis, 2 in the veins of the lower extremities and 1 in the veins of the left arm.

In a recent paper by Gold and Degraff, mention was made of how little digitalis is necessary in ambulatory cases of fibrillation to maintain a slow rate and an efficient circulation, often as little as 1-2 gr. of the powdered leaves a day kept up for years. This has been our experience both in private practice and in our clinic. We have one patient who gets coupled rhythm on  $1\frac{1}{2}$  gr. of the powdered leaves every other day. Their observations might be further extended to state, that many, if not most, cases of auricular fib-

rillation in failure, rarely need the huge doses of digitalis which it has been the custom of recent years to give. In most cases the need is not urgent, a few days are always available, and the heart can usually be brought under control with moderate doses of digitalis, without the hazard which the larger doses may entail. I saw a case recently where the patient was having frequent Stokes-Adams' seizures, from digitalis which had been given in massive doses to control a heart in moderate fibrillation with hypertension. There are some cases where speed is necessary, but in my opinion, they are uncommon.

Where congestive failure with edema occurs, in cases where the heart is regular and the rate not high, or where the rate is high, it is the general belief that digitalis, while it may not reduce the rate, benefits the patient and reduces the edema by its action on the kidneys and the heart.

In addition to digitalis it is usual to give some of the diuretic drugs to aid in the reduction of edema, particularly where the simpler measures of rest, reduction of fluid, and restriction of salt are not effective. Of the diuretic drugs, in my hands the theobromin preparations are most effective. Theobromin sodium salicylate, 10 to 15 gr. 3 or 4 times a day, is usually most satisfactory. The theophyllum preparations, in my experience, have no advantage over the above. The mercurials, novasurol and salyrgan are most powerful diuretics and are often effective when other measures fail; however, they belong to the list of therapeutic clubs occasionally necessary but not to be used until simpler measures have failed. I have seen at least 3 serious results follow their use. One of salivation and severe colitis followed the injection of 1 c.c. novasurol; another of severe mercurial nephritis, with albumin, blood and casts in the urine; and a third with complete suppression after 1 injection. It is the custom when using these mercurials, to precede administration by a course of ammonium chloride 10 gr. 3 times a day for 4 or 5 days.

I do not believe patients with congestive failure can be successfully treated while on their feet, in a chair, or going to the bath



room. It has been my plan to insist on *absolute bed rest*, until edema has entirely disappeared and the condition of the heart improved. This usually means 4 to 6 weeks in bed, after which the rest must be partial, and the activity gradually increased.

## RADIOGRAPHIC DIAGNOSIS OF GALL-BLADDER PATHOLOGY

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In the study of the gall-bladder by oral cholecystography, the mechanism and physiology of the gall-bladder emptying must be considered, and as regards physiology, one of the first questions presented is: How does it become filled with bile and how does it empty?

According to McMaster, when digestion is completed, the tone of the sphincter of Oddi rises, pressure in the ducts increases, and as soon as it reaches 70 mm., bile begins to flow into the gall-bladder. During the process of digestion, the sphincter of Oddi relaxes and pressure in the ducts cannot rise above 120 mm. of bile because at that point the duct discharges into the duodenum. It was also found that pressure in the gall-bladder was always low when the animal was fasting, and was seldom more than 100 mm. of bile; it always increased after eating foods like cream and yolk of eggs. It is also interesting to note that according to Holweg, 40 c.c. of bile in the gall-bladder represents 350 c.c. of bile from the liver; the gall-bladder bile having about 10 times the density of liver bile, because bile pigments and salts were greatly concentrated in the gall-bladder. To clinically prove this point, it was found that if the gall-bladder was removed and the common duct ligated, jaundice developed within 4 hours, whereas, if the gall-bladder was left intact and the common duct ligated, the gall-bladder could store so much of the bile pigments that jaundice would not develop in less than 48 hours.

It was upon this function of "concentration

of bile", that the Graham-Cole test for gall-bladder visualization was based, for here we assume that a diseased gall-bladder will not concentrate a dye containing iodine that is excreted by the liver and will not become visible in a roentgenogram.

However, because of the fact that a pathologic gall-bladder sometimes concentrates well, it is essential to know that the muscular coat of the gall-bladder is thin and that it only contains one layer of fibers; the connective tissue layer under the serosa is nearly 3 times as thick. It is this coat that is extremely rich in elastic tissues and blood vessels, and when even a mild grade of cholecystitis sets in we find the elastic coat involved, causing disturbances in the organ's contractility and distensibility.

In order to secure a good cholecystogram after administering the halogenated phenolphthalein, it is essential that the stomach and duodenum do not contain food. This is apparent because if gastric digestion is in progress, bile is permitted to enter the duodenum by way of the common bile-duct with the result that the bile containing phenolphthalein will not enter the gall-bladder to produce a shadow.

It has been proved by Graham that when the hepatic ducts are ligated to prevent access of bile to the gall-bladder, after injection of tetra-iodophenolphthalein, the shadow remains for many days, in spite of the ingestion of egg yolk and cream which is supposed to incite contraction strong enough to empty the gall-bladder within a few hours. It seems apparent, then, that the mechanism of emptying the gall-bladder is complex in that, besides intrinsic muscular contractions and elastic recoil, the washing out of bile from the gall-bladder through the liver is also apparent.

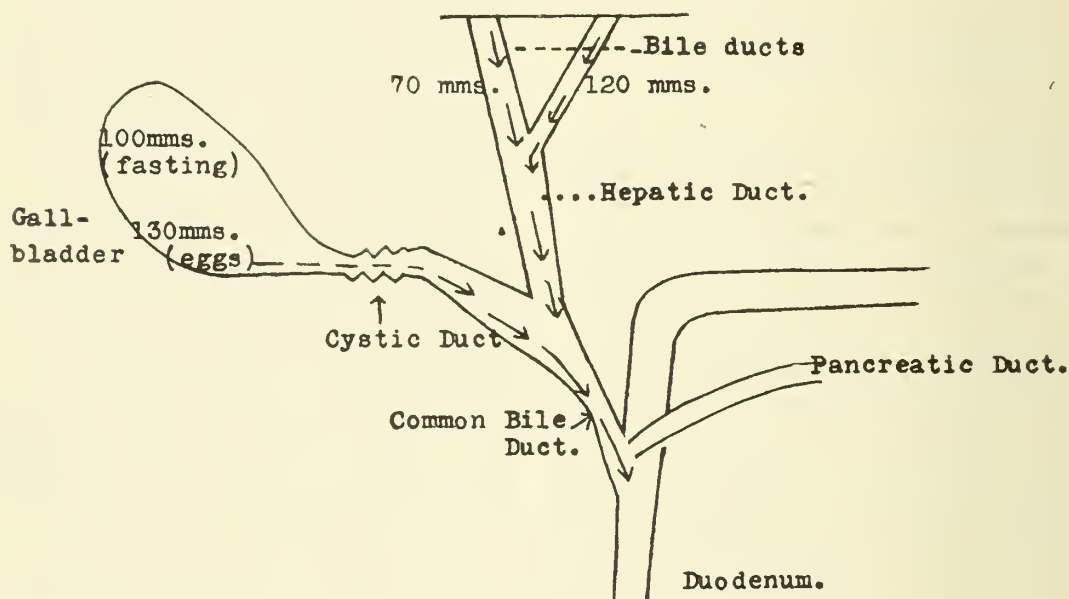
Chronic inflammation in the gall-bladder is expressed pathologically by increase of connective tissue and accumulation of leukocytes in the wall. Changes in the structure of the gall-bladder abnormally are likely to produce disturbances of its normal physiology. The "absorptive activity" of the gall-bladder may be one of the functions disturbed early by inflammatory reaction.

Active inflammation and its results interfere with the absorptive power of the gall-bladder by involving the lymphatic and blood supply and consequently they do not permit normal concentration of the iodized phenolphthalein which is used to produce the shadow after exposure to Roentgen rays. This interference with concentration expresses itself on the film by a decreased density or by an absence of the shadow of the gall-bladder.

Radiography is a "study of the contrasts

administration is resorted to, we make examinations at 15, 19 and 23 hours following ingestion of the dye.

The visualized gall-bladder alters in size, being largest at some period between the tenth and twelfth hour, and becoming smaller from that period onward. These changes throw light on the distensibility and contractibility of the gall-bladder. These physical properties are definitely shown after ingestion of a fatty meal, where the gall-bladder shadow



### The pressure gradient of bile.

in density". Realization of this has led investigators to seek means for enhancing contrasts or generating them where they are non-existent. These efforts consisted of filling hollow structures with a contrasting substance of greater density than their surroundings, and the procedure offers a vast amount of information as to size, shape, position and outline. The dyes employed in cholecystography are excreted by the liver, reach the gall-bladder in small but increasing quantities, mix with the bile there present, and become concentrated to the point where the gall-bladder is opaque to x-rays. If alimentary

decreases markedly in size. In order for these physical properties to manifest themselves the viscus must be free from any rigidity, infiltration or inflammation within its walls.

Pathology in the biliary tract may roentgenologically be expressed by:

- (1) Non-visualization of the gall-bladder.
- (2) Faint visualization of the gall-bladder.
- (3) Delayed appearance of the gall-bladder.
- (4) Deformity of the gall-bladder; con-



- genital or acquired; intrinsic or extrinsic pericholecystitis.
- (5) Cholelithiasis.
  - (6) Persistence of gall-bladder.
  - (7) Excessive size of the gall-bladder.

- Non-Visualization
- {

1. Obstruction of cystic or common ducts.

2. Acute infections of liver.

3. Absence of gall-bladder.

4. Ingestion of food.

5. Edema.

6. Pregnancy.

7. Kinks in cystic duct.

8. Malignancy.

9. Jaundice.

}

- Faint-Visualization
- {

1. Partial obstruction of cystic or hepatic ducts.

2. Mild grades of cholecystitis.

3. Lack of distensibility.

4. Vomiting and lack of dye.

5. Stout patient.

6. Asthenic.

}

- Persistence of Shadow
- {

1. Abstention from food.

2. Reabsorption of dye from intestinal tract.

3. Great amount of dye given.

4. No evidence of pathology.

}

- Excessive Size of Gall-bladder
- {

1. Obstruction to cystic or bile-ducts causing bile retention.

2. Congenitally enlarged gall-bladder.

}

tality from the degenerative diseases of the heart and blood vessels in all age periods after 40, and its deadly selectivity among the most useful and enlightened members of the community, it is small wonder that a need for further clarification of this problem has arisen.

Into every doctor's office and into every hospital clinic certain patients make their appearance, who carry with them a more or less vague clinical syndrome which somehow seems to gravitate toward the impression of a failing heart. Yet, after the most thorough and painstaking cardiovascular survey in which has been used every conceivable aid rendered by the most modern instrumental and laboratory procedures, little if any specific pathology is discovered. At the same time, however, the experienced and well grounded clinician will not be satisfied with this relative summation of his findings and will reserve judgment until further searching studies have been made. To all of these cases the term chronic myocarditis has been indiscriminately applied in the past; the inadequacy of this loose and unscientific diagnosis has been apparent to most physicians for many years. Vast strides and continual advances made in the field of cardiology and medicine in general, have made the use of this term decidedly untenable and a crying need for a better and more specific designation has come about.

It is interesting, therefore, that although this condition has been well known and well recognized, it is only very recently that any serious attempt has been made to distinguish and classify the failing heart of middle life from the purely inflammatory types of acute or chronic myocardial affections. Indeed, it was not until 1929 that attention was sharply focused upon the marked differentiation between the original concept of *myocarditis*, as a manifestation of inflammatory phenomena, and *myocardosis*, the degenerative phase. It is to Riesman, of Philadelphia, a keen observer, that we owe the selection of the word *myocardosis*, which to our minds is peculiarly fitting in filling the gap produced through our increased knowledge of the cardiovascular diseases. We may now define myocardosis as

MYOCARDOSIS; THE FAILING HEART  
OF MIDDLE LIFE  
Further Observations  
(No. 3)

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The introduction of a newer concept of cardiovascular changes in many individuals approaching or past the so-called "middle-age" grouping has naturally stimulated much useful and needed discussion in regard to this timely and fundamental question. With all statistical tables pointing to a staggering mor-

a physiologic state engendered in the heart and blood vessel system as the result of coronary insufficiency with its accompanying impoverishment of the myocardium. This undernourishment, because of improperly regulated blood supply, leads to certain metabolic disturbances in the heart as a whole, so that the organ no longer is able to respond to the various functional demands made upon it in the course of every-day stress and strain. It must be pointed out here that we are not concerned with frank disease of the coronary arterial tree, with its thrombosis, occlusion and infarction phenomena; these are the later and well-nigh hopeless terminal pathologic changes which invariably develop in the course of degenerative processes of this type. When the coronary system has become so involved that thrombosis occurs, no special problems of diagnosis are presented; many general and specific methods of examination are now available to facilitate a correct estimation of such pathology. Here the electrocardiograph, x-rays, function tests, biochemical analysis, and a clarified and distinct symptom-complex are brought into play.

Myocardosis, in its earlier manifestations, on the other hand, presents no such points for clinical and laboratory analysis; for this reason, diagnosis and recognition of the condition is far more difficult and uncertain. Vague, indistinct, intangible and subtle changes in the physiologic response of the cardiovascular system as a whole to physical demands, which previously have brought no concern to the individual, now tax the clinician's sense of judgment and cumulative experience. Into this group come many of our middle-aged citizens with symptoms so remote that more often than not these do not arouse any suspicion or hint as to their true origin and sinister significance. The brunt of responsibility, therefore, rests upon the examiner through whose early recognition of this symptom-complex we may hope to reduce, or at least retard, development of true coronary pathology or its uncomfortable associate—angina pectoris.

Many observers have pointed out the existence of this form of lessened cardiac

efficiency, and to it have been given several appellations. Christian, of Boston, considers many of these patients as coming within the group that he calls "non-valvular heart disease". His classification, however, falls far short of describing the vast majority of such patients, as the question of presence or absence of valvular lesions hardly enters into the syndrome. What is of far greater importance is the extent of coronary insufficiency suffered by individuals regardless of the status of their valve mechanism. While it is unquestionably true that valve damage in the younger age groups is for most part of rheumatic origin, it has also been shown that the rheumatic virus does not confine itself to the valves alone and will affect any part of the cardiovascular system. It is therefore conceivable that coronary arterial changes of purely degenerative origin may be superimposed on a pre-existing inflammatory process.

Winterberg, just prior to his untimely death a few years ago, spoke of an important group of presumptive cardiacs who with no previous cardiovascular pathology suddenly suffered a "plötzliche herzwachheit". In reviewing these cases, he pointed out that a retrospective diagnosis was always possible in these sudden cases of heart weakening, and step by step the gradual development and onset of the condition could readily be traced. He made a plea for a more careful examination of the symptoms before they reached the stage of heart failure, and he felt that sooner or later a symptom-complex would be described in which a potential diagnosis of the condition might be made. Since publication of our first paper upon the myocardosis syndrome, we have been especially gratified by the almost universal response stimulated by the introduction of this newer concept of cardiovascular impairment into clinical medicine. Both in this country, and abroad, comments favorable, and some rather acrid, have shown the widespread interest aroused by our concept of this condition. Elmer and Rose, for example, in the new edition of their very comprehensive text-book on Clinical Diagnosis, have this to say:

"For the type of myocardial disease which is purely degenerative, Hyman and Parsonnet have



suggested the term 'myocardosis'. Only time will tell whether this term will become a part of our medical vocabulary, but it is important to distinguish in our minds the inflammatory from the non-inflammatory diseases of the myocardium."

In this connection it is interesting to compare another recent volume upon heart disease; White approaches this subject from the older and unsatisfactory point of view. Let us quote his interpretation of this condition:

"The clinical diagnosis of 'myocarditis', so freely used in the past, has wrongly included many other conditions, in particular, the frequent instances of hypertensive heart disease in which there is cardiac hypertrophy and enlargement but no inflammatory reaction in the muscle; the term 'myocarditis' has also wrongly included frequent instances of coronary disease, in which degenerative changes, fibrosis and atrophy may occur without actual inflammatory process. In the attempt to diagnose heart disease more accurately, the term myocarditis is being wisely abandoned in large part; we must remember, nevertheless, that there does exist occasionally such a condition as myocarditis."

Throughout this entire passage we see the author groping for a term which would encompass his so-called "myocarditis"; he does not find nor use any and leaves us entirely unconvinced.

We have indicated in our previous publications the fundamental pathologic origin of the phenomena included in the term myocarditis, either acute or chronic; the component parts of the inflammatory processes as they are seen in the heart muscle, both from a clinical and postmortem angle, form a separate and distinct picture from that seen in the myocardosis syndrome, where no such inflammatory reactions are observed. To consider a patient suffering from coronary insufficiency, with its attendant triad of symptoms—dyspnea palpitation and substernal distress—in the light of inflammatory disease is obviously fallacious. Such individuals are not suffering from chronic myocarditis, if the term is to be used as an interpretation of pathologic change seen in the inflammatory response of other organs. Why should the heart be singled out and burdened with a term that has no bearing upon its true underlying pathology?

In selecting the term *myocardosis* the attempt was made to sharply differentiate such purely inflammatory changes from the disturbances resulting from an inadequate coronary blood supply to the heart muscle. We agree with Wolffe in considering the myo-

cardosis syndrome as embracing a clinical entity which includes within its symptomatology certain manifestations of the cardiovascular system unprepared and unable to meet the usual demands of effort. In other words, these hearts are found to be suffering from a marked lessening of myocardial reserve power, in spite of the fact that they have practically no other clinical manifestations.

Three chief symptoms stand out above all others; these are the original 3 steps to heart failure, described by Kauffmann. In the order of importance they are substernal distress, dyspnea and palpitation. When any one of these, or a combination of them, suddenly develops in an individual approaching middle life, who up to such time had been free from such complaints, that patient may well warrant a presumptive diagnosis of myocardosis.

Substernal distress is a subjective sensation which depends in great part upon the intellectual level and introspective ability of the individual in interpreting this type of discomfort. Upon racial characteristics and psychologic make-up will depend the degree with which patients will complain about this symptom. Localized and more or less limited to the substernal area, it most frequently occurs after physical exertion. When it develops after stair climbing or walking up slight inclines, in persons who have habitually performed such daily tasks as a part of their occupational routine, it becomes a striking and dominant part of the patient's symptomatology. Indeed, it may be this single fact which brings him to the physician's office, in contrast to the symptoms of dyspnea and palpitation. It has been our experience that middle aged individuals presenting this symptom demand close scrutiny and repeated cardiovascular study, for sooner or later unmistakable evidences of myocardial breakdown will become apparent. These cases must not be confused with the mild types of angina pectoris which respond therapeutically to the vasodilators.

The onset of dyspnea may be more difficult of analysis; Kauffmann was fond of making the observation that no one could determine when the normal physiologic response of breathlessness after exercise became the

pathologic entity of heart failure. Given enough stairs to climb, even the most perfectly conditioned athlete will eventually suffer from dyspnea, but his return to normal will be smooth and rapid; in the middle-aged individual who suffers breathlessness on a short flight of stairs, his return to the resting state may be a prolonged and painful process. So far as this latter individual is concerned, many factors must be considered in estimating the degree of cardiac impairment; occupation, physical make-up and the overweight incidence all play an important rôle in determining the pathologic aspect of dyspnea. Although many tests have been devised to measure the dyspneic factor, none can be applied with greater accuracy than a comparison of a subject's physical activity over a given period of time. To measure the breathlessness of a laborer by the same standard as that of a sedentary clerk is obviously fallacious; the only yard-stick of standardization must be the individual's own reaction to routine effort.

Palpitation, or heart consciousness, apparently occurs with equal frequency from youth to old age; in many instances it seems to be of no special pathologic import. When, however, a middle-aged person, who previously experienced no such complaints, appears before his doctor because of palpitation, this symptom also warrants careful evaluation. If the heart consciousness is due to an irregularity of cardiac rhythm, the symptom is more easily interpreted than when no change or interruption in the pulse rate is observed. Taken together, therefore, the symptoms of substernal distress, dyspnea and palpitation may be regarded as the great triad of subjective sensations experienced by patients undergoing the initial stages of coronary insufficiency. To these may be added the more remote and much more elusive symptoms of insomnia, gastro-intestinal upsets and personality changes. It is not our intent here to enter into any long and elaborate discussion of the variegated symptomatology of the myocardosis syndrome; this we have given elsewhere.

We have merely attempted here to repeat our objections to the concept of chronic myo-

carditis which is so prevalently held in spite of its glaring inadequacies both pathologic and clinical. We have tried to show that there exists a definite physiologic state which antedates the frank development of coronary arterial disease. This period is associated with no demonstrable pathology and its recognition rests solely upon the observational acumen and judgment of the physician alone. We believe that it is only during this period that any serious attempt to curb or combat the relentless progression of the vascular degenerative changes in the heart is possible. Myocardosis, therefore, must be regarded as more than a new name for an old disease; it is, as a matter of fact, a designation spelling a new approach to the understanding of the earliest manifestations of coronary insufficiency.

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## FUSOSPIROCHETAL DISEASE OF THE LUNG\*

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We wish to call your attention this afternoon to a variety of pulmonary lesions which, though previously regarded as distinct diseases, are really different manifestations of one type of infection, namely: infection by certain spirochetes and fusiform bacilli closely allied to those which cause Vincent's angina. Some of the pulmonary lesions caused by this group of organisms have received scant atten-

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\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, at Asbury Park, June 4, 1931.)



tion until very recently, while others, notably lung abscess and gangrene, have received considerable attention both as to pathogenesis and therapy. A formidable literature has accumulated about lung abscesses during the past decade, but it is only recently that the bacteriology of lung abscess has been thoroughly studied, and that experimental work has shown the majority of lung abscesses to be caused by aspiration of the anaërobic group of mouth organisms—fusiforms, spirochetes, vibrios and certain streptococci.

The change that has come about during the last few years concerning the etiologic significance of spirochetes in these lesions is dramatically shown by the following: In one of the well known medical reference works published in 1928, George J. Heuer, Professor of Surgery at the University of Cincinnati, writing on lung abscess and gangrene, states that spirochetes only very rarely cause lung abscess, and mentions them not at all in his discussion of gangrene; but in an article published in February, 1931, the same author, reviewing the recent literature on lung abscess, apparently concludes that probably in 75% of lung abscesses, in 80% of cases of bronchiectasis, and probably in all cases of gangrene, the mouth anaërobic, of which spirochetes are members, are probably important causative factors.

The term—fusospirochetal disease of the lung—is probably open to criticism, inasmuch as the vibrios and streptococci are also factors in producing the various lesions, but the term is found in the recent literature and it correctly emphasizes the importance of the fusiforms and spirochetes in the etiology of the disease, especially as these organisms give to the lesions their most characteristic clinical finding, namely, foul smelling sputum. In the past, these cases have gone under names, without etiologic specificity, of putrid bronchitis, bronchiectasis, atypical acute and chronic bronchitis, unresolved pneumonia, pulmonary abscess, and gangrene.

It is interesting to note that the spirochetes were demonstrated in the sputum and in sections from the lung in a case of putrid bronchiectasis and pulmonary abscess as early as 1867, by Leyden and Jaffe, in Holland, al-

though no significance was attached to the finding. Rona, in 1905, described the finding of spirochetes and fusiforms in necropsies of 2 patients with gangrene. Castellani, working in Ceylon, described in 1906, and later in 1909, some cases which presented clinical pictures resembling tuberculosis, but in which the x-ray findings were not characteristic and no tubercle bacilli could be demonstrated in the sputum. In these cases the sputum revealed many spirochetes which Castellani believed to be a specific type and which he called "spirocheta bronchialis", and to the condition he gave the name "bronchopulmonary spirochetosis". And, we may mention here that Castellani made no mention of the presence of fusiform bacilli.

Following Castellani's report, several other cases of bronchopulmonary spirochetosis were reported, but all were from tropical countries and until 1918 spirochetal infection of the lung was generally considered a tropical disease of which only a few cases had been described. The first cases on record in the United States are those reported by Johnson, from Mississippi in 1909, and by Rothwell from Missouri in 1910. These men found fusiform bacilli and spirochetes both in their cases. Johnson labeled his cases "bronchial Vincent's angina".

That relatively little attention had been given to fusospirochetal lung infection is best evidenced by the fact that only 150 cases of all types had been reported in this country up to 1929. During the past 6 years, several articles have appeared in the literature, contributing greatly to our knowledge of pulmonary spirochetosis; especially important have been the contributions of Pilot & Davis, Kline & Berger, and David T. Smith. David T. Smith, of Raybrook, N. Y., has probably reported the greatest number of cases and has done the best and most convincing experimental work, of which, however, we will mention only a few important features: Small pieces of membrane from patients with Vincent's angina, inoculated into the groin of a guinea-pig, produced a local abscess containing organisms identical with those in the original material. Pus from such abscesses, when introduced into the trachea of rabbits, produced

a series of lesions comparable to those found in man: pneumonitis, gangrene, abscess and bronchiectasis. This indicated that these various forms of clinical diseases have a common etiology in the anaërobic mixture of spirochetes, fusiform bacilli, vibrios and cocci present in Vincent's angina. None of these organisms alone would reproduce the disease, but a mixture of all 4 resulted in a typical fusospirochetal abscess in the groins of mice or guinea-pigs, and pus from those abscesses caused a typical fusospirochetal lesion in the lungs of rabbits.

Similar lesions were obtained in rabbits by introducing, intratracheally, material from cases of abscess, bronchiectasis and pyorrhea. Though Smith showed that a combination of spirochetes, fusiforms, vibrios and cocci were essential to produce the various lesions, there is no doubt that the spirochetes and fusiforms are the really important members of this group, in so far as they are the ones that destroy elastic tissue and are the primary invaders.

The spirochetes isolated from cases of pulmonary spirochetosis have been of different morphologic types and have been given various names, a few being: *Treponema microdentium*, *Treponema macrodentium*, *Spirocheta Vincentii*, *Spirocheta bronchialis*, *Spirocheta buccalis*, etc. These are all, probably, pleomorphic forms of the same organism. Vincent has shown that the same spirochete developed in different tissues may take on various dimensions and thicknesses, and may vary in the number of spirals and in motility. The number and amplitude of the spirals vary according to the state of vitality of the spirochete. There is also much evidence to show that the fusiform bacillus is really a spirochete in a different stage of development. One of us (C. A. Pons) has observed almost pure cultures of fusiforms converted to spirochetes of various morphology.

It is now definitely known that the group of organisms under discussion can cause at least 5 types of bronchopulmonary lesions:

(1) Acute, subacute and chronic bronchitis; (2) primary bronchiectasis; (3) pneumonitis; (4) pulmonary abscess; (5) pulmonary gangrene. No doubt several factors come into

play in the various cases, determining the type of lesion produced, severity and virulence of the infection, location and extent of the disease and resistance of the patient.

In *spirochetal bronchitis and bronchiectasis* the infection is limited to the bronchial wall. Chevalier Jackson and other bronchoscopists have reported ulcerations of the bronchial walls caused by spirochetes. If the ulcerations are limited to the mucosa, the picture of a severe bronchitis, occasionally with bloody, foul expectoration, will be noted; in such cases the x-ray picture may be negative. Chronic cases of this sort may strongly resemble tuberculosis in their symptomatology. It is very likely that the great majority of cases of primary bronchiectasis are due to spirochetal infection.

*Bronchiectasis* is treated, even in the latest text-books, as being always secondary to mechanical causes, and no mention is made of a larger group, of cases which are primarily and result from spirochetal infection. Smith described development of these cases as follows: "The mucosa is destroyed and the microorganisms, ever striving to get away from the free oxygen on the surface, advance further and further into the bronchial wall. The elastic tissue framework of the bronchus is destroyed, and portions of it may be found in the sputum in the form of small compact bundles of elastic fibers. The blood vessels in the bronchial wall are eroded, causing blood-tinged sputum or actual hemoptysis. With the destruction of elastic tissue there is a gradual dilatation of the bronchus somewhat similar to the dilatation of a blood vessel following destruction of its elastic tissue by *Treponema pallida*. After the elastic and muscular layers of the bronchus have been destroyed, the disease may extend into the surrounding lung, causing an extensive loss of pulmonary tissue and producing what is commonly called a bronchiectatic abscess. (Whether the resulting dilatation will be sacculated, fusiform or cylindric, probably depends upon the numbers and positions of the primary points of invasion in the bronchial wall.) When the disease process is checked, nature attempts to heal the lesion by fibrosis. Dense scar-tissue forms all along the bronchus, and this leads



at times to partial or complete stenosis, so that areas of constriction may alternate with areas of dilatation. In acute lesions, the surface of the bronchial ulceration is ragged and congested, but later, when the inflammatory process has subsided, the normal mucosa at the edges of the lesion may grow down and cover over the surface of the dilated area."

*Pneumonitis.* In many cases the organisms will invade the lung parenchyma and produce inflammatory lesions which may be sharply circumscribed or diffuse, with or without cavity formation. The pulmonary infiltration when diffuse may be either lobular or lobar in distribution and may invade either the upper or lower lobes. From a roentgenologic standpoint these lesions, particularly when in the upper lobes, may greatly resemble tuberculosis. Undoubtedly these areas of pneumonitis are the precursors of abscess and gangrene.

*Abscess.* The lesion of uncomplicated fusospirochetal abscess is that of a bronchopneumonic consolidation with central necrosis. The process is at first acute and often becomes subacute and chronic. The most common site is the right lower lobe, although any lobe may be involved. Severe lesions may be multiple from the beginning or there may be rapid spread from the primary abscess and formation of new abscesses. In this spreading type of lesion there is great tendency to gangrene and the abscess cavities show marked necrosis with green discoloration and intense putrid odor.

At the beginning there is a wall of collateral inflammation which, in chronic cases, later becomes replaced by dense fibrous tissue. Kline, Pilot, Smith and others have all reported the peculiar arrangement of the organisms in zones through the experimental abscess and in those cases that have come to necropsy. Sections through the abscess show masses of bacteria of various types in the central necrotic area; peripheral to this, a zone where the spirochetes are mixed with the vibrios and cocci, and an outermost zone composed of pure spirochetes (sometimes with fusiforms) which seem to be invading the normal tissues.

*Pulmonary gangrene* shows a fulminating

process in which destruction of pulmonary tissue is extensive and rapidly progressive.

Our interest in bronchopulmonary spirochetosis was aroused, principally, by the work of D. T. Smith a little over 2 years ago. Since then we have been continually on the *qui vive* for cases which we knew to be more common than was ordinarily supposed. We have been particularly interested in discovering early bronchial involvement, although many of our cases have been those of extensive pneumonitis, abscess and gangrene.

During the past 2 years we have observed 29 cases of fusospirochetal abscess of the lung. Of these, 26 cases have been carefully studied, treated with sulpharsphenamin, and personally followed, and they form the basis of this report. Of these 26 patients, 14 were from our ward service at the Monmouth Memorial Hospital; 3 were from the Monmouth County Tuberculosis Hospital, at Allenwood; 3 were from private practice; and 6 were seen in consultation with other physicians. There were 10 females and 16 males, and ages ranged between 20 and 40 except for a boy of 12.

These 26 cases have been divided into the following groups

- (1) *Acute fusospirochetal bronchitis* (4 cases).
- (2) *Primary fusospirochetal bronchiectasis* (5 cases).
  - (a) Acute (2 cases).
  - (b) Chronic (3 cases).
- (3) *Fusospirochetal pneumonitis* (10 cases).
  - (a) Simple diffuse (5 cases).
  - (b) With bronchiectasis (2 cases).
  - (c) With cavity formation (3 cases).
- (4) *Fusospirochetal pulmonary abscess* (6 cases).
  - (a) After tonsillectomy (2 cases).
  - (b) After tooth extraction (1 case).
  - (c) Spontaneous (3 cases).
- (5) *Fusospirochetal pulmonary gangrene* (1 case).

At this point it might be well to say a word about our method of *examining the sputum*. As it is well known that 80% of normal mouths and 100% of septic mouths harbor

spirochetes, certain measures were necessary to prevent contamination of the sputum with the mouth spirochetes. So, sputum was washed through successive changes of saline and a small piece of purulent sputum was removed from the center to make a very thin smear. We have used Fontana and various other stains but have found the Harris modification of the Kiewe stain the best for demonstrating spirochetes. The sputum should be fresh and examined immediately because it has been shown that spirochetes disintegrate very rapidly. Quite often we found spirochetes only after repeated examinations.

That spirochetes and fusiforms are not secondary invaders is shown by the fact that they are not found in other lung lesions. Smith failed to find spirochetes and fusiforms in 150 cases of uncomplicated pulmonary tuberculosis, in 6 cases of asthma, and 5 cases of mycotic infection of the lung; and we failed to find them, though searched for repeatedly, in cases of pulmonary tuberculosis, asthma and other chronic pulmonary affections.

The following is a summary of the findings in the 26 cases studied:

Cough	26
Expectoration	26
Foul sputum	24
Fever	25
Loss of weight	20
Pleural pain	14
Hemoptysis	12
Night sweats	8
Chills	5
Dental sepsis	18
Infected tonsils	10
Spirochetes found	26
Fusiforms found	26
Vibrios found	12
Physical signs	24
X-ray findings positive	23
Wassermann and Kahn positive	6
Wassermann neg. and Kahn pos.	3

*Treatment* in these cases consisted essentially of the administration of sulpharsphenamin intravenously, and postural drainage. The average number of injections was 5; the average dose given was 0.6 gm. The number and frequency of dosage was influenced by the type of case and severity of the symptoms. A definite improvement was noted in practically every case as soon as sulpharsphenamin was administered.

We are aware that other spirochetal drugs have been used successfully in this disease

(especially bismuth), but we have had experience only with sulpharsphenamin. We obtained good results in all early cases with it, so continued with its use. Postural drainage was carefully carried out in all cases of abscess and bronchiectasis and we feel that this procedure also played a great part in the recovery of these patients.

The results of treatment were:

	Cured	Improved	Unimproved
Bronchiectasis			
5 cases	2	3	—
Bronchitis			
4 cases	4	—	—
Pneumonitis			
10 cases	7	3	—
Abscess			
6 cases	2	2	2
Gangrene			
1 case	1	—	—
Total	16	8	2

We wish to present the following cases in our series of 26 with fusospirochetal infection, as illustrations of the various types of lesions encountered:

#### CASE HISTORIES

*Acute fusospirochetal bronchitis.* S. P., aged 24, mechanic, colored, was admitted with the diagnosis of Vincent's angina, severe and existing for 10 days. Two days before admission had marked cough with purulent expectoration. There was marked gingivitis, with ulceration in the pharynx, and coarse râles were heard over both lungs anteriorly and posteriorly. Sputum was copious, sanguinopurulent; and contained myriads of fusiform and spirochete organisms. X-ray examination negative. Wassermann + 2.

Sulpharsphenamin was given on admission, and 3 days later the expectoration was markedly diminished and cough very slight. Patient signed release from hospital, and his family physician reported that after 1 other sulpharsphenamin injection the cough and expectoration rapidly diminished and he has remained well ever since. The Vincent's infection of the mouth cleared up in a short time.

A similar case was that of F. J., aged 28, a colored laborer, who had a sudden onset of illness with chill, general malaise and cough 3 days before admission. Cough soon became productive of a blood-tinged, purulent sputum.



No definite hemoptysis and no chest pain. Admitted with diagnosis of influenzal bronchopneumonia. He had a marked dental sepsis, and many coarse râles were heard throughout the right chest anteriorly and posteriorly; no signs of consolidation. Sputum showed myriads of fusiforms and spirochetes. Wassermann and Kahn tests were negative.

Injection of sulpharsphenamin effected a gradual improvement until at the end of 2 weeks there was a normal temperature and negative physical findings; sputum very scant and negative for spirochetes; radiograph shows accentuation of pulmonic regions in the upper right lung; fluoroscopic examination shows slightly diminished aëration of both sides.



Fig. 1. Fusospirochetal Bronchiectasis. Lipiodol Injection.

Sulpharsphenamin was given 3 times with intervals of 3 days. Temperature down after the third injection; râles practically all disappeared; general condition much improved; sputum diminished. Recurrence of temperature, with increase in the cough and expectoration, followed in 10 days, but another in-

*Fusospirochetal bronchiectasis.* J. G., aged 15, a white student, had a cough, with copious expectoration for 9 months; occasional pain in the chest; running a slight afternoon temperature for 3 weeks. At times the sputum has been blood-tinged but has not had a definite hemoptysis. Frequent colds as a child. Ad-

mitted with diagnosis of pulmonary tuberculosis. Well nourished young boy; tonsils diseased; coarse râles over the right base posteriorly. Sputum was negative on repeated examination for tubercle bacillus but fusiforms and spirochetes were found. X-ray

After 2 injections of sulpharsphenamin, temperature remained normal; cough and sputum greatly diminished, and spirochetes disappeared.

*Acute fusospirochetal pneumonitis.* Mrs. E. V., aged 32, white housewife, was admitted



Fig. 2. Acute Fusospirochetal Pulmonitis, right base.

picture before lipiodol injection shows accentuation of pulmonic markings of both bases, particularly the right; near right hilus there was a large fibrous ring. After lipiodol injection, marked bronchiectasis was noted over the right base. (See Fig. 1).

to the Monmouth Memorial Hospital with diagnosis of tuberculosis. For 3 weeks previously the patient endured a cough which after a few days became productive of a thick, purulent sputum; 1 week before admission had a brisk hemoptysis; also had night sweats



and pain in the right chest. There was marked dental sepsis; infected tonsils; chest-dullness and diminished breath sounds over the right base posteriorly; and coarse râles over the right upper lobe posteriorly and over the left base. Sputum was copious, sanguinopurulent for a few days and (4-8 ounces daily) contained myriads of fusiform and spiro-

rates slightly. A lipiodol injection shows slight bronchiectasis. (Fig. 4). Patient gained 15 lb. in weight and when seen 2 weeks after discharge had no cough, expectoration, nor any other symptoms referable to her chest.

This case, we feel sure, would have gone on to abscess formation if the diagnosis of spirochetal disease had not been made and treat-

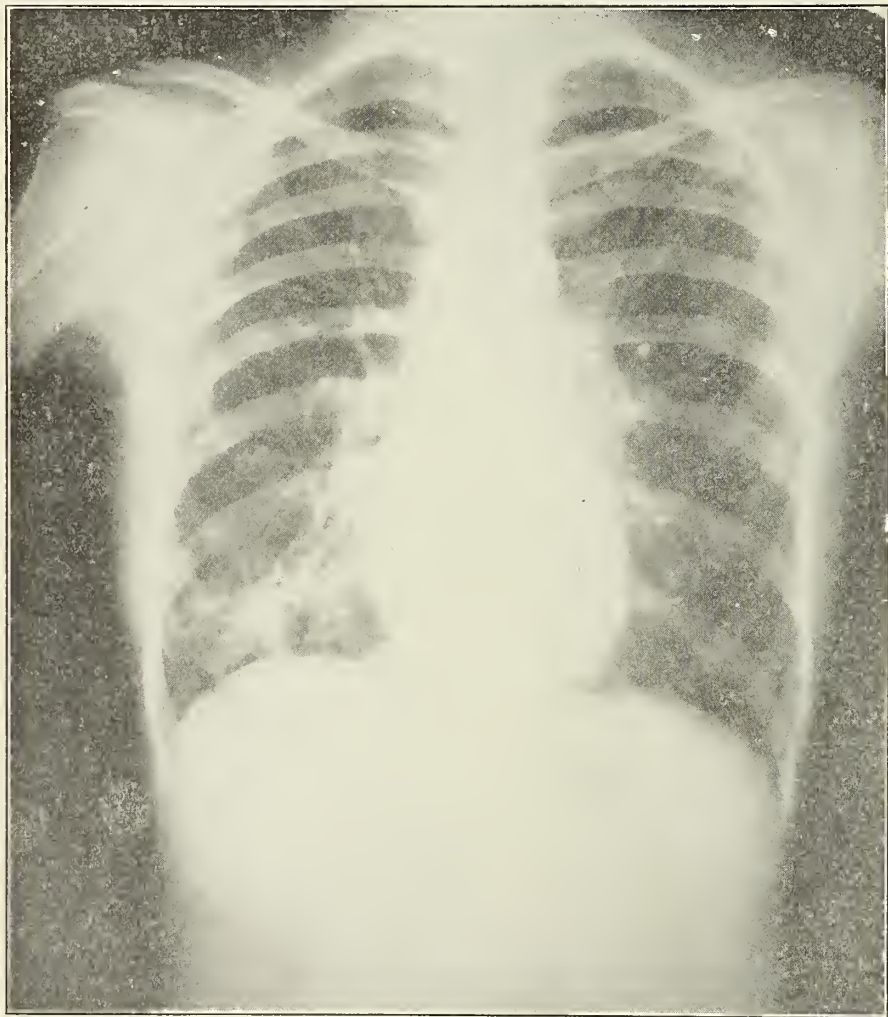


Fig. 3. Fusospirochetal Pulmonitis 2 weeks after treatment.

chetes. Wassermann and Kahn + 4. Radiograph on admission showed infiltration of the extreme right base. (Fig. 2).

Sulpharsphenamin was given every 4 days for 5 doses and sputum diminished in amount after the second dose. Radiograph taken 2 weeks later shows improvement (Fig. 3); another, 4 weeks later, shows chest completely cleared, but patient still coughs and expecto-

ment instituted early. It is interesting to note that this patient was syphilitic. We believe that many of the cases reported as being lung syphilis, because of clearing under arsphenamin therapy, are fusospirochetal infections.

*Diffuse fusospirochetal pulmonitis with cavity formation.* T. A., aged 27, white salesman (patient of Dr. J. E. Maher), was admitted to the Monmouth Memorial Hospital November

3, 1930. Perfectly well up to 4 weeks before admission when he began to experience sharp stabbing pains in the left chest radiating to the shoulder, and he had developed an unproductive cough with fever and dyspnea. Diagnosed as pleurisy. The pain remained for

cryptic and markedly diseased; impaired resonance at the left base posteriorly; diminished breath sounds of the entire left lung with faint bronchovesicular breathing at the left base posteriorly; fine and medium coarse râles heard over the entire chest posteriorly

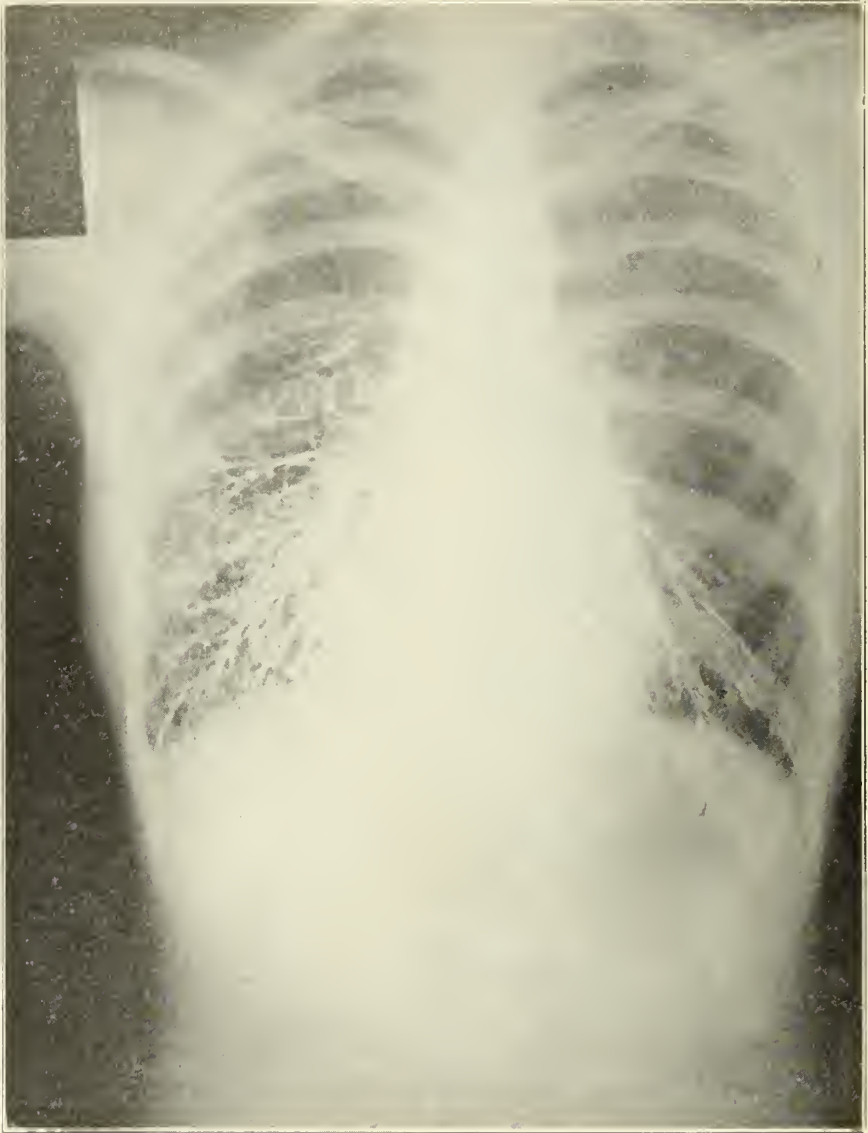


Fig. 4. Fusospirochetal Palmonitis 6 weeks after treatment. Lipiodol Injection. showing slight Bronchiectasis.

about 4 weeks, after which the cough became productive of a thick purulent sputum, and 4 days before admission the sputum increased in amount, became blood-tinged, and had a distinctly foul odor; about 8 oz. daily. Teeth and gums in good condition; tonsils large,

and in the left axilla; few fine râles anteriorly. Sputum showed myriads of fusiforms and spirochetes, and some comma-shaped bacilli (vibrios). X-ray picture shows slight pleural exudate in the upper left lobe; interlobar pleurisy. Marked infiltration extending into



the costophrenic angle. The entire condition appeared to be a pulmonitis of the left upper and lower lobes. (Fig. 5).

Sulpharsphenamin .03 gm. administered November 5 and .06 gm. on the tenth. Patient showed no marked improvement until

and pain in the chest had returned. Sputum examination showed again many fusiforms and spirochetes; radiograph showed reactivity in the lung at the left base. One injection of sulpharsphenamin was given within 4 days and the symptoms improved to such

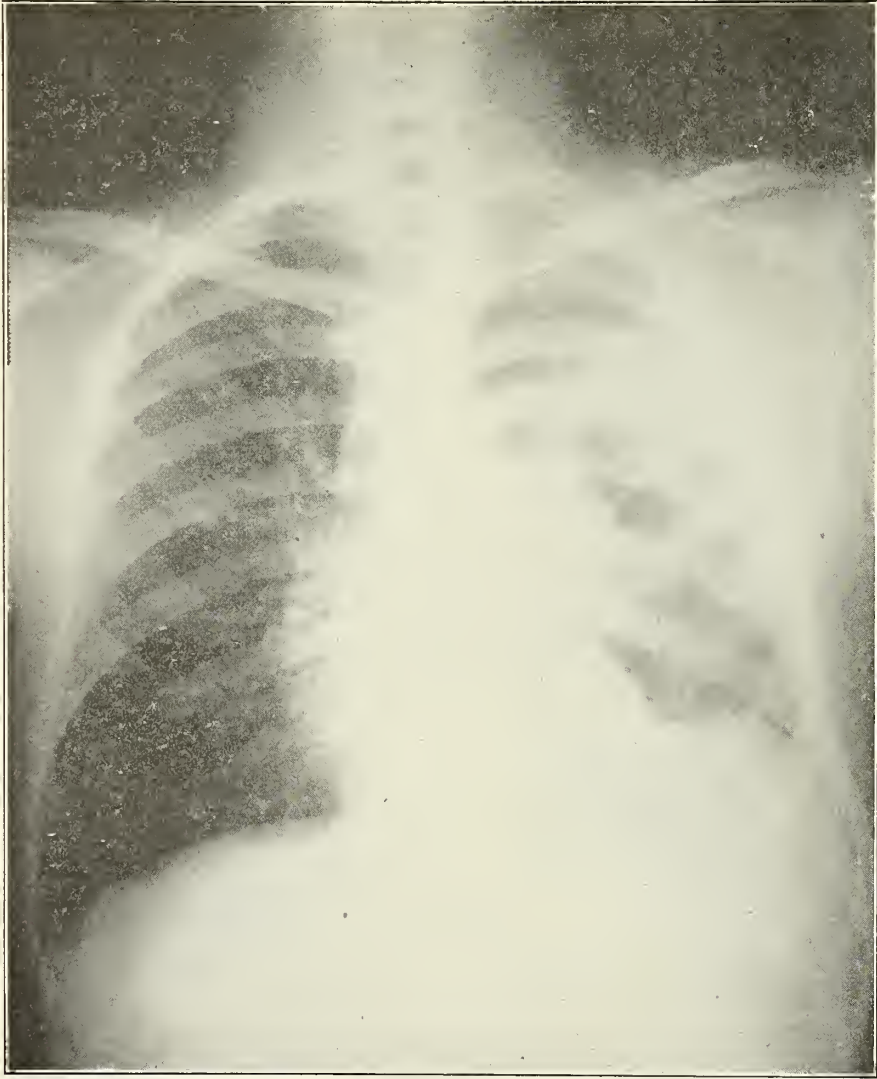


Fig. 5. Diffuse Fusospirochetal Pulmonitis with cavity formation.

2 weeks after first injection, when breathing became easier, and cough slightly diminished though still productive of a thick, foul sputum. Three doses sulpharsphenamin .06 gm. each were given November 19, 24 and 30, and patient, discharged December 22, went to work shortly afterward, and did not return for reexamination until January 10, 1931, at which time the cough, expectoration

an extent that the patient was again discharged.

Since his second discharge from the hospital his physician states that he is very uncooperative and has failed to return for injections, stating that he feels perfectly well, coughs little and rarely expectorates. Radiograph taken in April shows marked improvement over his previous picture but still shows

some fibrosis in the left lung. At this time there are no spirochetes or fusiforms in the sputum.

We believe that this case shows extensive infiltration due to spirochetes, fusiforms and allied organisms, with abscess formation; the focus being in the tonsils. We feel that if

developed pain in the right side of her chest, with fever and a dry cough; condition diagnosed as pleurisy. She quickly recovered and seemed well until February 25, when she began to raise copious amounts of foul smelling sputum. At this time the temperature was  $102^{\circ}$ . The cough and expectoration became

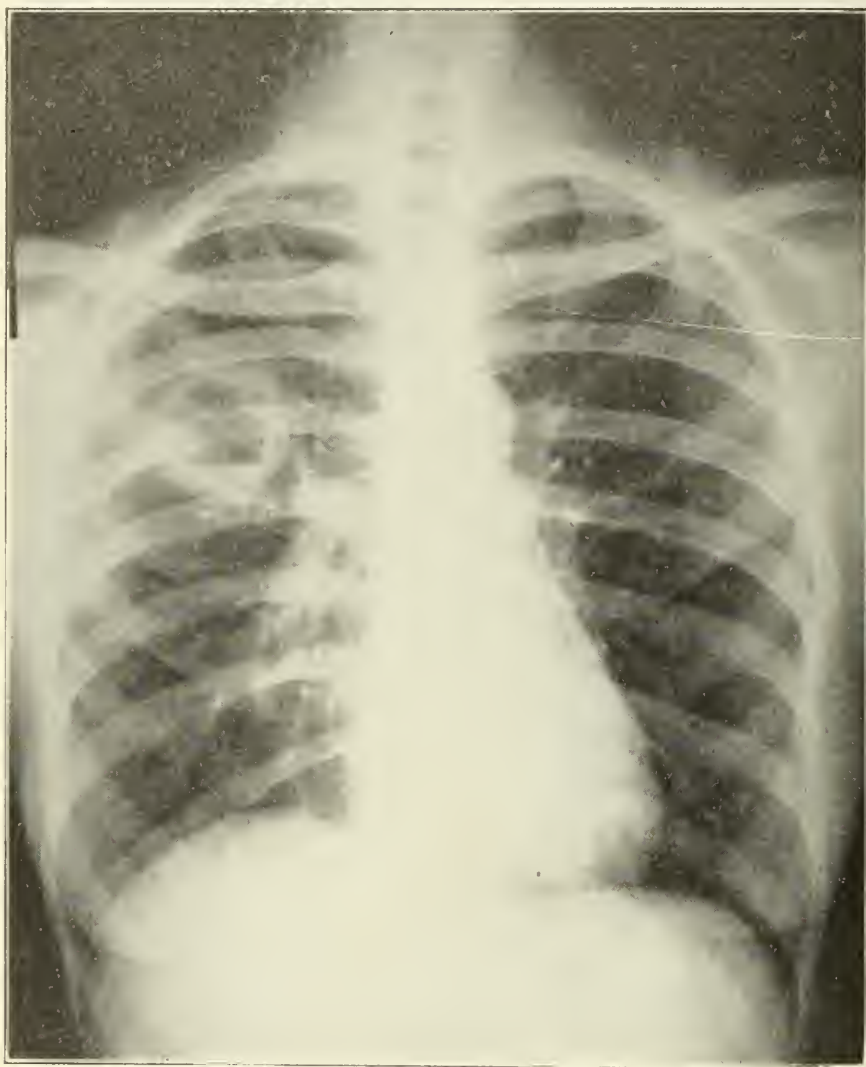


Fig. 6. Spontaneous Fusospirochetal Pulmonitis Abscess in right upper lobe. Note fluid level.

the diagnosis had not been made, this case would have gone into pulmonary gangrene and ultimate death.

*Spontaneous fusospirochetal pulmonary abscess.* (Patient of Dr. K. Brown.) Mrs. V. H., aged 36, white, housewife, was perfectly well until January 12, 1931, when she suddenly

more pronounced and the patient, becoming worse, was admitted to the Ann May Hospital on March 11, at which time she was coughing up quantities of a foul-smelling, purulent sputum, occasionally blood-tinged. Examination of this sputum on several occasions failed to show tubercle bacilli but show-



ed many spirochetes, fusiforms and vibrios. An x-ray picture taken March 12 showed a definite abscess in the right upper lobe. (Fig. 6). Patient appeared critically ill, was suffering from marked anemia; transfusion was done; and 3 injections of sulpharsphenamin were given intramuscularly at 4 day intervals

tion became less and the temperature gradually came down; sputum examination April 17 showed no spirochetes or fusiforms and had no foul odor. Patient has been under observation of her physician since discharged from the hospital and at present seems to be in the best of health, without cough or ex-

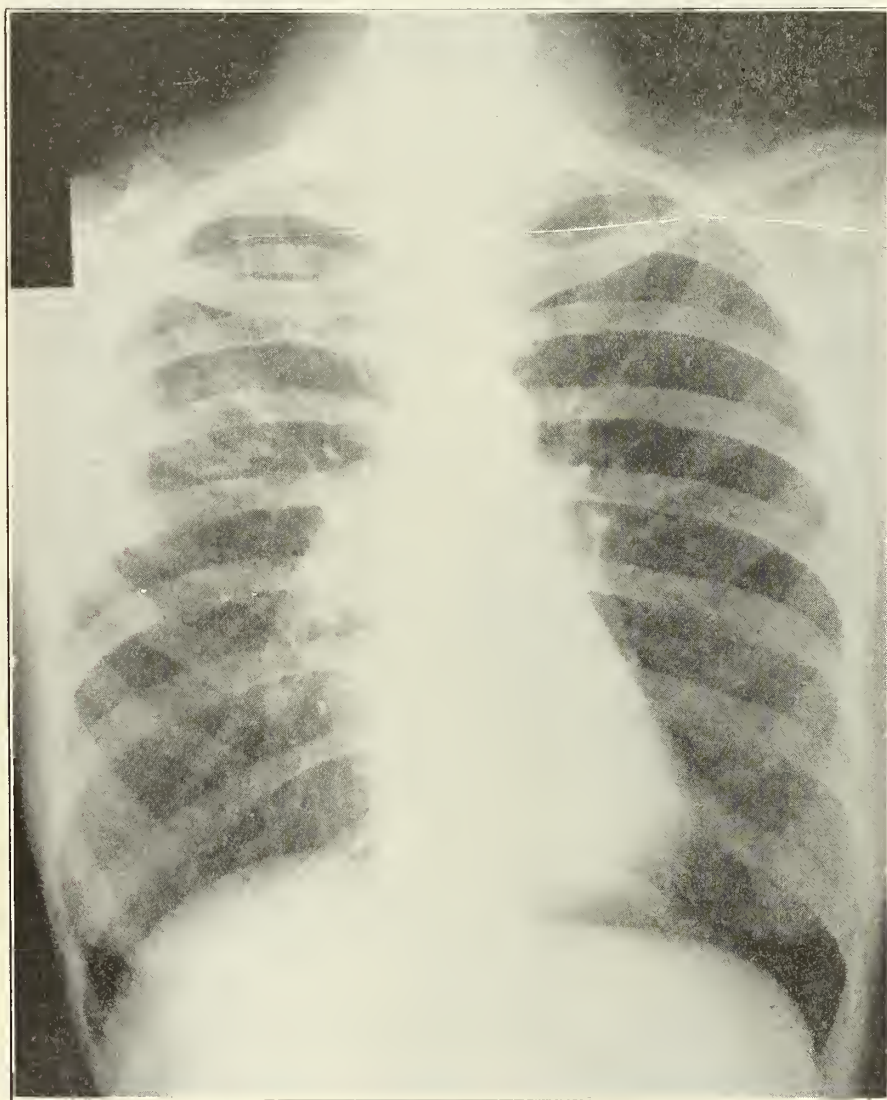


Fig. 7. Spontaneous Fusospirochetal Pulmonary Abscess 8 weeks after treatment.

with no marked improvement. An injection intravenously, on March 30, and 3 more injections were given at 4 day intervals thereafter. Almost immediate improvement was noted after the first intravenous; improvement gradually became more marked during the ensuing 2 weeks; cough and expectora-

tion became less and the temperature gradually came down; sputum examination April 17 showed no spirochetes or fusiforms and had no foul odor. Patient has been under observation of her physician since discharged from the hospital and at present seems to be in the best of health, without cough or ex-

pectoration. Radiograph taken May 15 shows remarkable improvement. (Fig. 7).  
*Fusospirochetal gangrene of the lung.* J. M., aged 39, colored laborer, was admitted with the diagnosis of acute rheumatic fever; for 2 weeks previously had polyarthritis with high temperature; acutely ill man with mark-

ed swelling of the knees, wrists, elbows, and left ankle. Teeth and gums in fairly good condition, although there were 2 crowned teeth that looked suspicious. Tonsils markedly congested, cryptic and enlarged. (Patient states that at the onset of joint symp-

right axilla. From this time on, the patient gradually became worse, the cough and pain increased, and definite dulness, with bronchovesicular breathing, developed in the right side just below the angle of the scapula. Diagnosis of pneumonia was made. The patient's



Fig. 8. Fusospirochetal Pulmonary Abscess after tooth extraction. Roentgenogram taken 3 months after onset of symptoms. No improvement after Sulpharsphenamin therapy.

toms he had a very severe sore throat.) After receiving salicylates for 1 week the joint symptoms improved, but he developed cough and pain in the right chest which increased on deep breathing; and 3 days later a few fine and medium coarse râles were noted in the

cough became productive of a thick purulent sputum which was definitely foul in odor and slightly blood-tinged. This was examined for tubercle bacilli, fusiforms and spirochetes but none were found. Suddenly, he became very much worse, an x-ray showed a diffuse peri-



bronchial and pulmonary infiltration in the right lung extending from the hilus in all directions evenly on all 3 lobes, and the picture was that of a pulmonitis resulting from hilus infection spreading over equally in all directions. Costophrenic angle was relatively clear. (Fig. 9). Then he had a severe fit of coughing, with a brisk hemoptysis of about 4 oz. of pure blood. Examination of sputum at this time showed many spirochetes, fusiforms, vibrios, streptococci and elastic tissue. The condition gradually became very much worse, temperature running high, cough and

foul. Physical signs gradually diminished and a radiograph showed marked clearing of the right side lesion. There was still diminution in aëration and some evidence of fibrosis. (Fig. 10). Patient was finally discharged with negative physical findings and a temperature which had been normal for several weeks, and when seen 3 months later was back at work and had no symptoms referable to his pulmonary experience. Wassermann in this case was +4.

It is interesting to note that this man developed gangrene of the lung while in the

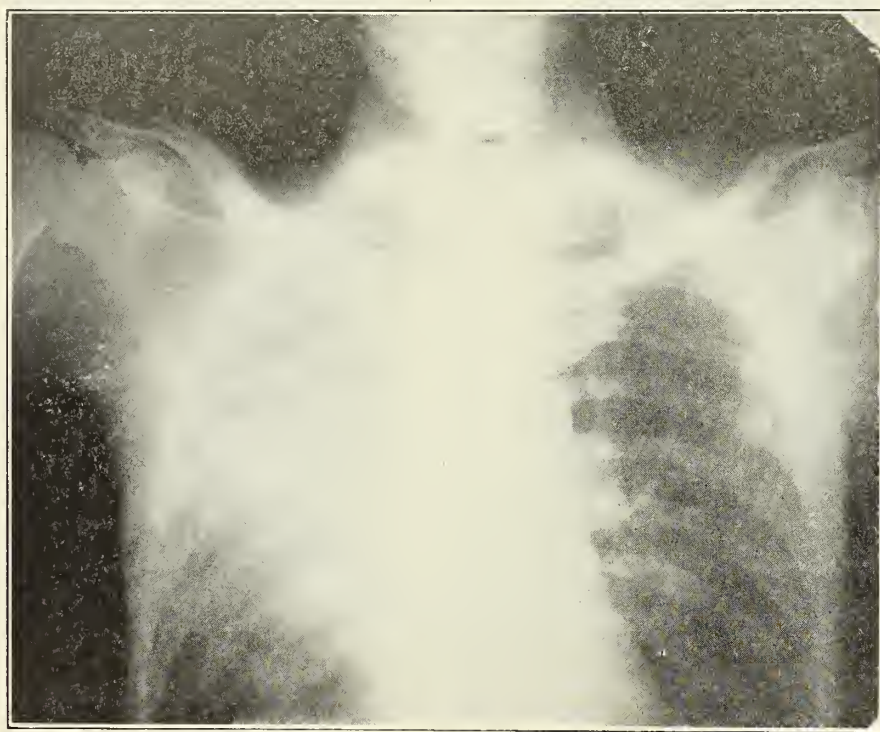


Fig. 9. Fusospirochetal Pulmonary Gangrene.

purulent expectoration increasing to a very marked degree and having a severe hemoptysis every other day. From the clinical picture, the character of the sputum which was indescribably fetid, and from the x-ray findings, the diagnosis of gangrene of the right lung was made. The quantity of the sputum averaged from 10-15 oz. daily, and after standing it separated itself into the classic 3 layers. Injections of sulpharsphenamin were given and improvement was noted after the fifth; temperature began to fall and the sputum to diminish in amount and become less

hospital, having been admitted for an entirely different condition, namely, rheumatic fever. It is also interesting to speculate on the source of the spirochetes that, undoubtedly, caused his gangrene. He had no dental sepsis, but he did give a history of having had a severe sore throat at the onset of the rheumatic fever, at least 3 weeks before onset of the gangrene. It may be that he harbored these organisms in his respiratory tract for some time and that his other ailments lowered his resistance, so that it was only after several weeks of illness that his resistance was

so lowered that the spirochetes were able to produce damage. The rapid spread of the disease showed that once the organisms entered his lung, the infection spread like wild fire. It is interesting to note, particularly, that the disease had gained great headway and that extensive gangrene of the lung had occurred before proper treatment was instituted. but that in spite of this, marked clinical improvement was noted after the fifth injection of sulpharsphenamin and complete cure after the eighth injection.

been realized hitherto. Probably 80% of bronchiectasis cases and 75% of lung abscesses are caused by this type of infection.

(2) Though spirochetes are present in 80% of normal mouths, they are found in huge numbers in patients with dental sepsis and diseased tonsils. In these cases, huge numbers of these organisms are probably aspirated into the bronchi and broncho-alveolar recesses. The aspiration of these organisms may follow operations about the oral cavity



Fig. 10. Fusospirochetal Gangrene 6 weeks after treatment.

#### CONCLUSIONS

From a study of the recent literature, and from our own study of 26 cases of fusospirochetal pulmonary suppuration observed between May 1929 and May 1931, we present the following conclusions:

(1) Various types of pulmonary suppuration (fetid bronchitis, primary bronchiectasis, certain types of pneumonitis and certain cases of abscesses or gangrene), up to very recently regarded as unrelated entities, are really different manifestations of infection by spirochetes and other anaërobcs closely allied to those causing Vincent's angina. This type of infection is much more frequent than has

and general anesthesia or may occur spontaneously.

(3) In cases of chronic pulmonary suppuration where the tubercle bacilli and fungi are not found, search should be made for spirochetes and fusiform bacilli. Foul smelling sputum certainly should always lead one to search for spirochetes. These organisms do not stain well with the ordinary dyes and are usually overlooked in the routine examination of sputum, but are usually demonstrated with the Harris modification of the Klieve stain or Fontana stain.

(4) When treated early and intensively, the various lesions found in fusospirochetal



disease of the lung respond readily to sulpharsphenamin. In cases of early pneumonitis, pulmonary gangrene, and pulmonary abscess, this improvement is often dramatic, even in the face of extensive pathology demonstrated by x-rays.

Cases of chronic lung abscess with extensive fibrosis around the abscess cavity do not respond to sulpharsphenamin and probably should be treated surgically, but even in these cases sulpharsphenamin should be used prior to operation.

(5) Postural drainage is an important part of the treatment, particularly in bronchiectasis and abscess cases.

(6) Prevention of these lesions depends on proper oral hygiene.

#### DISCUSSION

*Dr. William P. Belk* (Philadelphia): I have for 10 years been pathologist at Bryn Mawr Hospital, in a suburb of Philadelphia, and, though aware in a vague way of this type of lung lesions. I never until recently found such a case. About 4 months ago Dr. Pons told me of the work you have just heard reported, and explained how to examine sputum. Since that time I have examined 45 individuals who might possibly have had this infection, and of those, found 7 to be typical cases; a positive finding of 15%. Inasmuch as this condition is easily confused with pulmonary tuberculosis, I reviewed the results of examining 100 consecutive sputums for tubercle bacilli. They were positive in 12% of the cases. These numbers are small, but I think quite significant, and I should like to suggest, which is probably true, that fusospirochetal disease of the lungs is as common in ordinary hospital practice as is pulmonary tuberculosis. That the Vincent's organism is etiologic in this condition is proved, beyond doubt, by the experimental work of Smith and Kline, Berger and others. I have recently, myself, without any difficulty, produced very characteristic lesions in the lung of a guinea-pig by injecting into the groin material from the teeth of an individual with pyorrhea; the lesion in the lung was crowded with spirochetes and fusiform bacilli.

I wish to read to you 1 case history, not because it is spectacular, but because it isn't: It is a very simple, ordinary case such as we all see very often. This is a white female, 27 years of age, who is a house maid. She said she had coughed ever since she could remember. In January of this year her cough became worse and she visited the medical clinic in Bryn Mawr Hospital. She was afraid she would lose her position because the cough was annoying her mistress. Her physical examination was entirely negative, including the lungs. Her health was good; blood count normal, Wassermann negative. The radiograph was that of a typical chronic bronchitis. She was treated with the ordinary cough mixtures, several of them being tried, without result. Eventually, the sputum was examined and found to be negative for tubercle bacilli, but to contain a large

number of spirochetes. She was given 4 intravenous injections of neo-arsphenamin, at the end of which time she was distinctly better, but still coughed some, and the sputum contained a few spirochetes. The last injection caused toxic symptoms. For that reason emetin was given, 4 injections on 4 successive days. A week following this, upon visiting the hospital, she was very happy because her cough had practically entirely ceased. Her sputum was then examined and spirochetes found only with great difficulty and after a prolonged search. I think this case is important to us all because it is such a simple thing, a simple chronic bronchitis cured, I believe, by a specific form of treatment.

I would like again to emphasize to you, what I am sure is true, that this disease is common, that it is productive of very much pathology, and that there is for it a very satisfactory, specific form of treatment.

*Dr. W. G. Herrman* (Asbury Park): I would like to emphasize the variety of lesions that are seen roentgenologically in these cases and to urge everybody to be on the watch for them. I suppose that patients in many of the hospitals represented here, are handled much as they are in ours; patients come with a preliminary diagnosis of some form of respiratory infection, and often, prior to any clinical examination or history taking, they are sent to the x-ray laboratory, and the roentgenologist is supposed to express an opinion on what he finds. In such cases we know nothing about any sputum examination. Unless we question the patient ourselves, we know nothing about the history. You have seen here the wide variety of lesions that can be caused by this type of infection. I do not think that it is only tuberculosis with which it may be confused. So far as the x-ray picture is concerned, unless the radiographs are viewed with the history in mind, there is oftentimes no characteristic appearance. Of course, a lung abscess will be diagnosed as a lung abscess, but I have noticed that in many of the cases with pulmonitis, either single or multiple areas, that lung striations will be quite visible through the involvement, and the lesion will not appear as a definite consolidation. Such lesions should at once throw you on your guard. As Dr. Altschul has told you, spirochetes burrow through the wall of the bronchus, and a true peribronchial infiltration and exudation is produced. We feel that there are a great many cases of this infection now going unrecognized, so far as the exact nature of the offending organisms is concerned. The possibility of a fusospirochetosis should be considered in every case of respiratory infection, unless you have a frank case of pneumonia or pulmonary tuberculosis.

*Dr. C. A. Pons* (Asbury Park): For a number of years I have been reporting on the presence of spirochetes in the sputum without exciting any interest on the part of the clinicians. Two years ago I found numerous spirochetes in a man's sputum. He was discharged from the hospital, only to return with an extensive pulmonary gangrene. If you look for spirochetes you are going to find them, but you must use special stains, and when found they should be numerous.

Another interesting case was one in which Dr. Parry, of the Spring Lake Hospital, removed a gangrenous appendix. Had I not cut that appendix, the diagnosis of spirochete disease of the appendix would have been lost. The foul smell on sectioning the organ led me to make smears,

and later a Levaditi on the sections, and I am happy to say I have shown them to Dr. Belk, and he agrees that it is as typical a case of spirochete infection as you would want to find from mouth lesions.

## CLINICAL EVALUATION OF A CONCENTRATE OF VITAMINS A AND D\*

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It is interesting to note that years before vitamins were known, some physicians routinely prescribed cod-liver oil for certain types of patients. One type embodied those patients having low resistance, those who caught "colds" easily; such patients were told to take cod-liver oil from November to April. The acutely conscious physician with years of experience had frequently observed that when persons with a tendency to upper respiratory infections took this form of medication, they increased their resistance and were less susceptible to colds during the winter months. Certainly, this deduction was purely empiric, but it is, nevertheless, in close harmony with present day scientific observations, which stress the relationship between vitamin A and its anti-infective properties. Investigators have ascertained that the marine diatoms synthesize the vitamin A, and that it is transferred to the tissues of minute animals which thrive on the unicellular plants. These in turn form the food supply of larger species, particularly, small fish, which in their turn are devoured by the larger fish, such as the cod. Through all these stages, there is apparently a transference of the vitamin, ending finally in storage in the liver of the cod. The modern methods of manufacturing cod-liver oil do not especially lower the vitamin value but there apparently exist variations in its value, probably connected with the seasonal changes in the feeding habits or physiologic conditions of the fish.

Clinical interpretations, coupled with observations on laboratory animals, lead us to

agree with the theory of the older physicians, that the constituents embodied in cod-liver oil comprise a significant element in preventing illness prevalent in the so-termed "respiratory months".

In an early discussion of cod-liver oil, Osborne and Mendel made the following statement: "It is perhaps more than a mere coincidence that cod-liver oil has so long enjoyed a reputation for nutritive virtues which can scarcely be attributed to its fat content *per se*." In view of the recent investigations conducted with animals and humans, the question has naturally arisen as to whether this potency is due to vitamin A.

McCollum and Davis were the first to observe in animals the relationship of respiratory infections to a diet deficient in vitamin A, but similar deductions were reported by Drummond. These findings were confirmed by Steenbock, Sell and Buell, and further substantiated in the respiratory realm and in other infections by Mellanby and Green, Pfannensteil and Scharlau, Nakahara, Manville, Tyson and Smith, Bradford, and others. There appears to exist but little doubt regarding the importance of the fat-soluble vitamin A in human nutrition, and certain phases of individual well-being both in experimental animals and man.

Quite recent observations are reported by Tilden and Miller on 11 monkeys kept until death on a diet containing but 6 to 12 units of vitamin A daily, and on 6 monkeys maintained on a similar ration except that it contained from 250 to 700 units of the vitamin each day. The symptoms of illness noted in the monkeys receiving the low vitamin diet were loss in weight, followed later by anorexia, colitis and death; while 6 monkeys on control diet, with 1 exception remained well and gained weight. This single monkey developed a non-fatal dysentery. Turner and others found that pyogenic cocci are more frequently encountered in those animals that show the most severe symptoms of vitamin A deficiency. Further evidence is offered that cod-liver oil protects the nasal cavities and middle ear against bacterial invasion. Lassen's experiments were confined to para-

\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, Asbury Park, June 4, 1931.)



typhoid bacilli, in which he found that resistance to this organism was markedly decreased by a deficiency of vitamin A. At the International Pediatric Congress held in Stockholm, 1930, Alfred Hess stated that "irradiation alone and its equivalent had no effect on infections of the upper respiratory tract and did not prevent them".

In the present stage of scientific interpretation it is generally conceded that cod-liver oil exerts a specific action both in the prevention and treatment of rickets. In spite of known qualities in the past as an antirachitic, and its more recent attribute as an "anti-infective" agent, its use has not been as free as its therapeutic qualities would warrant. Gordon and Flanders, in a recent clinical survey, concluded that the effects of cod-liver oil concentrate on various respiratory symptoms suggested that supplementary vitamin A administration is of distinct value. It was also noted that a sensation of well-being and increased appetite appeared in 35% of his patients. Wharry observed that "patients bedridden from causes other than tuberculous, and not treated with fatty foods or cod-liver oil, often developed urinary troubles of an infectious and very serious nature". Sherman has stated that "with so much direct experimental evidence of wide-spread weakening of the body when the intake of fat soluble vitamin is low, it is not surprising that this dietary deficiency should have been assigned as a contributing factor in such diverse diseases as rickets, tuberculosis and pellagra".

During the past few years, many have preferred the pure vitamin D preparations, which allow exact dosage, in prevention and cure of rickets. Cod-liver oil, however, also contains vitamin A, the importance of which had been unjustly relegated to the background by scientific research concentrating on the vitamin D element. Where the supply of vitamin A is missing or lacking to an appreciable degree, there is no growth and keratomalacia, pyelitis and other infections develop; indicating a diminished resistance to bacterial infection. Beumer states that this has been demonstrated not only by animal experiments but, unfortunately, also by involuntary whole-

sale experiments in institutions where babies had been fed skimmed milk.

The use of cod-liver oil as a remedy has a long history, and has been admirably presented by Guy. Records of its use by physicians do not appear until the end of the eighteenth century, but 20 years ago Rosenstern wrote: "Cod-liver oil is in the forefront of children's remedies. For long it has been struggling against the skepticism of exact science." Schabad, in 1900, first demonstrated in metabolic experiments that cod-liver oil possesses certain peculiar properties regarding the utilization of calcium and phosphorus in connection with the study of fats in relation to rickets. As early as 1754, a Dr. Percival called attention to the value of cod-liver oil in the treatment of rheumatism. He lived among fishermen and found that for generations they had used cod-liver oil in treating the disease, contending that since it softened leather it should soften stiff joints. Perhaps he advocated its use both internally and externally.

Most clinicians have recognized the value of cod-liver oil following infections of the respiratory tract, but very few have stressed the importance of its administration as a prophylactic agent in respiratory conditions. Its alternative qualities have been acknowledged as embracing one of the best available tonics, observing caution, however, against its use in digestive disorders, avoidance in cases in which there is a fat disturbance, and conceding that it is not well borne during hot weather.

Mariott called attention to the danger that may arise in the use of ergosterol indiscriminately as a substitute for cod-liver oil; the former containing vitamin D alone, but having its specific usage in rickets, tetany and osteomalacia.

I cannot agree with some writers who state that children possess an instinctive liking for cod-liver oil. Lust suggests that older children be given a chocolate or peppermint tablet before and after the oil. It seems hardly necessary to mention that the successful use of vitamins A and D in cod-liver oil depends entirely upon its administration in such form as to provide for ready acceptability and sub-

sequent efficient absorption and assimilation. The flavored oil did not offer the child marked inducement for ready acceptability—and for various reasons emulsions, jellies, capsules, wines and extracts failed either from a therapeutic or from a palatable viewpoint.

With the introduction of ergosterol the pediatrician was enthusiastically receptive, feeling that in this product there was offered a substitute for cod-liver oil, which could be used in a like manner—without its accompanying deterrent features. Experimental researches soon demonstrated the necessary presence of vitamin A, which was lacking in ergosterol; relegating it, as a distinct entity, to its rightful place in therapeutic distribution of vitamin D.

In the search for a more generally acceptable embodiment of vitamins A and D, wafers of cod-liver oil concentrate were used in the Betty Bacharach Home for crippled children for 7 months from November 1, 1930 to June 1, 1931. The ages ranged from 18 months to 16 years and included both bed-ridden and ambulatory patients, comprising diseases of the nervous system, bone and glandular tuberculosis, osteomyelitis, heart affections, rickets, and malnutrition; a total of 70 children. Similar observations were carried out in a boarding institution, ages ranging from 6 months to 10 years, a total of 25 children. Practically all children were kept under uninterrupted observation. The medication was crushed for the infants and given in the bottle or with the cereal—and the tablets were handed to children at stipulated hours. Dosage for infants and younger children was 3 wafers daily—and older children received 6-9 tablets daily.

*Taste.* No child resented the taste but, on the contrary, many expressed a desire for them. A few, knowing their relationship to cod-liver oil, objected at first but this distaste was quickly overcome after a few doses.

*Appetite.* Certain children, whose appetites were apathetic, showed an increased interest in food at meal time. In all patients, lessening of the appetite or nausea was not experienced, and increase in weight was a noticeable factor.

*Administration.* The wafers may be crushed and put in the bottle for an infant. It has also been advisable to mix the dose with the cereal for those infants who did not finish the bottle but took the entire cereal feed; thus insuring entire dosage.

*Toxicity.* Apparently there exists no immediate or cumulative toxic element in taking larger doses of these tablets. One child, 3 years of age, chewed and swallowed 20 wafers on one occasion without any functional or organic disturbance.

*Conclusions.* The routine usage of sufficient amounts of vitamins A and D has a background embodying scientific and justifying results.

In evaluating the types of experiments, it seems reasonable to conclude that vitamin A assumes a significant rôle in the defensive mechanism of the experimental animal, as well as the human. Our present knowledge obviously indicates that a liberal supply of fat-soluble vitamins is a highly potent factor in maintaining a satisfactory measure of health and vigor. Clinical interpretations, coupled with observations on laboratory animals, lead us to agree with the theory of the older physicians that cod-liver oil (due to the presence of vitamins A and D) will assist in preventing illness prevalent in the "respiratory months".

Cod-liver oil concentrate can be included in the dietary of the infant and child, and it appears that benefit can be derived therefrom. Proper hygiene, a well-balanced diet, with sufficient caloric intake, must always be accompanying factors. Given to 6 rachitic infants who had clinical signs and symptoms of rickets, moderate to marked improvement was noticed in all.

In a general survey of the incidence of respiratory conditions, especially of the upper air passages, it was felt that there existed a lessened tendency to this type of infection. During the winter months the community experienced a more or less general influenza epidemic, moderate in intensity. The 2 institutions mentioned were practically devoid of any contagion. Cod-liver oil concentrate was administered daily to 95 infants and children



without interruption for a period of 7 months. It is readily acceptable and appears to offer an Utopian form of cod-liver oil therapy, containing adequate amounts of vitamins A and D.

#### DISCUSSION

*Dr. Kenneth Blanchard* (East Orange): I have been much interested in Dr. Marcus' paper and want to say that from my own clinical experience I can, in some measure, support his results on cod-liver oil concentrate. Since February 1, we have been conducting a clinical study of the value of a council-accepted, cod-liver oil concentrate in tablet form, at the Orange Orphanage, where I happen to be Attending Physician. We have had 50 children on such treatment, the number being split into equal groups, and the oil group being used as controls. While the study has not yet progressed far enough to permit drawing final conclusions on the value of the oil over the concentrate, or vice versa, 1 or 2 facts are outstanding. It is unquestionably easier to secure routine administration with the concentrate which the children regard as a confection. The appetite of the group on concentrate is better than that of the oil group, due to the fact, I believe, that the fats are absent.

Also, the ease with which the concentrate is given secures much better coöperation from the nursing staff than when the oil is given; due to the palatability of the tablets. This winter, at the orphanage, we have come through with a marked decrease in the incidence of upper respiratory infections, and have had no epidemic of contagious disease despite the influenza prevalent in that section. Furthermore, those children who had formerly failed to gain, have shown noteworthy gains in weight and height on the concentrate. And, perhaps because of their physical well-being, they show better deportment.

*Dr. H. B. Silver* (Newark): It is very interesting to observe how little we learn from even the recent past. We listen to Dr. Marcus' paper, which was very interesting and the facts are undoubtedly of value, but we forget what was said about viosterol several years ago. The whole vitamin study is just opening up and I do not feel that we are quite justified at the present time in recommending any preparation, for after you check your vitamins A and D you do not get the same results as with cod-liver oil. We thought that we got from viosterol the same good effects as cod-liver oil gives. My feeling is that cod-liver oil contains a great deal that we know nothing about. We know something about the vitamins A and D but there may be numerous other vitamins that we know little about, also lipoids and fats in the content of cod-liver oil. I have not found so much difficulty in the use of cod-liver oil in private practice and I think the tendency should be to stay with cod-liver oil as much as possible for routine work and use other substances only when we cannot use the cod-liver oil.

*Dr. Stanley Nichols* (Long Branch): Dr. Marcus asked me to say a word about his paper. I think we will all agree that a clinical evaluation is a difficult thing in any field and pediatrics is no exception. I am sure there is a place for cod-liver oil concentrate. Time only will show how great a place. None of us has any doubt that cod-liver

oil increases resistance. The work of the Northwestern Reserve Pediatric Staff has shown us a great many things in a more exhaustive way. They included also adults in their cod-liver oil and other vitamin studies. Taking a large number of adults and children in Cleveland, over a period of years, they were able to reduce markedly their respiratory difficulties. When you have a control like that, you have a clinical evaluation of great merit.

Dr. Marcus said that administration of these vitamins was only necessary from November to April. I am sure we all used to feel that way but I have grave doubts now as to whether that is so. In the summer time, particularly when we have prolonged rainy seasons for 7-10 days, and there is no sunshine, it seems to me at such times it is essential to give these children some cod-liver oil. It has also been stated that it cannot be given in the summer time. I used to subscribe to that, along with the idea that you cannot give oatmeal to babies in the summer time, but I have been giving cod-liver oil in the summer for the past 4 or 5 years, in decreased doses, because I believe we do not always have enough sunshine to meet the requirements.

I was interested this winter in having some of my pediatric friends in Florida send their patients back here. From that place where the sun shines all the year round, babies came back taking 1 or 2 teaspoonsful of cod-liver oil a day. I have a notion that those men, some of whom are very careful observers, think that even Florida's sunshine sometimes is not enough to prevent rickets. I have seen Florida children, born and raised there, come here and show signs of rickets. I believe we should give some cod-liver oil in hot weather, and particularly in summers that have little sunshine.

I would like to say one thing about rickets, and that is that many pediatricians are discouraged with the use of cod-liver oil. They expect to cure in one generation the accumulated rickets of all time. We see patients who have not much tendency to rickets and seem to thrive without any very marked amount of antirachitic substances. I think it will take a number of generations of routine administration of cod-liver oil or its substitutes to get rid of rickets, and we must not expect it to happen in a single generation. Spasms of the spasmophilic group have been reduced greatly by antirachitic measures. Whether we agree with Dr. Silver or not, as to whether cod-liver oil may contain some other substance, no product has yet been found that equals cod-liver oil. The concentrate certainly has a field because we live in a time when the mothers like the simplest way out and they welcome viosterol which we were told had no difficulty for the digestive tract, although some of us do not believe that. I have seen some children who have had digestive trouble following its use, which ceased on stopping its administration. So far as the concentrate is concerned, I think we can use it largely with the type mother who wants the simplest way out and here she has a fair substitute for cod-liver oil. We notice by recent researches that there are other foods that now contain vitamin D. I hope the manufacturers will some day find something that will taste and smell better than cod-liver oil.

*Dr. Joseph H. Marcus* (Atlantic City): Skepticism indulged in by the physician of today is no doubt warranted. "Life is short and art is long." As in the case of ergosterol, it was soon emphasized through clinical analysis and laboratory evaluation that this product maintained a specific

relationship to the prevention and cure of osteomalacia, rickets and tetany, and could not be safely used as a substitute for cod-liver oil from all angles. It does not contain vitamin A but is a distinct vitamin D element. Dr. Nichols' thought embodies an ideal gesture. . . remove the objectionable features from cod-liver oil and retain the vitamins A and D. The full vitamin A and D content has apparently been removed in the small non-saponifiable fraction and embodied in these cod-liver wafers, that were administered to infants and children for 7 months.

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## LOOKING AT THE FACTS IN THE HIGH COST OF MEDICAL CARE\*

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When I was a boy at school in Vienna, it was customary to devote an hour twice a week to religious instruction. While all children of any different faith were permitted to recess during this hour, it was my habit to stay in occasionally and listen. Once one question was asked which I, for some reason or other, was able to answer. Thereupon this clairvoyant priest turned to the class and said: "This boy will be a President some day." The pride which I then felt was as nothing compared to the pride that was mine the day when you elected me President of the Academy of Medicine, 2 years ago. I want to assure you in all humility that I am grateful for and mindful of that honor and I take this opportunity to express to you my appreciation.

Anything that may have been accomplished, however, during that time could not have been done without the coöperation, courtesy and moral encouragement of my associates on the Council and without the active support of all members. I hope that you will extend the same courtesies to my successor, Dr. Eagleton.

This Academy, from a lowly beginning, has developed in 20 years into an institution of magnitude such as very few cities of our size can boast of and, with certain policies now inaugurated, it is destined to grow still further under leaderships far abler than mine. At this, the end of tenure of office, it is customary for the President to deliver a message. This

message should leave behind a grain of thought and may, with your coöperation and guidance, be developed into something useful and worth while.

A topic which is today uppermost in the minds of the profession and the public is the high cost of medical care, or rather, the high cost of being sick. Representing as we do a large majority of the scientific medical men in our community, a problem such as this is of paramount importance to the members of the Academy of Medicine. Any remarks which I make in the discussion of this subject are entirely impersonal, are directed against no specific individual, and should not be accepted as critical of any institution. The problem, as it strikes me, is to be considered as a whole, and a remedy found if possible.

Wingate M. Johnson, in an article in the *Atlantic Monthly*, recently said: "It is an open season for Doctors the year round" and, as you know, when this high cost is being considered, the doctor seems to be the one who is again held largely responsible. Casual observation and only cursory study will show you that this is not true. The problem is four-fold and concerns the doctor, the hospital, the nurse and the public. In this country we have about 150,000 doctors to 120,000,000 population. The average yearly income of these doctors has been estimated from as low as \$2000 in rural communities to about \$6000 in the larger cities. This is very little when you consider that a physician spends more than \$12,000 cash and 7 years of his time to fit himself for the profession. Most doctors are honest, industrious and hard working men, who are vastly underpaid for the services they render.

Hospitals, which have developed from institutions intended for the poor into palatial structures designed to attract the wealthy, in spite of big fees demanded, are always in debt. Nurses, who have risen to the daily wage of \$7 to \$8, are employed only part of the year and therefore their earnings are proportionately low compared with the services that they *should* give. Bear in mind that emphasis on "should".

These are incontrovertible facts for which

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\* (Address as retiring President of the Academy of Medicine of Northern New Jersey, May 21, 1931.)



no single agency is responsible and which cannot be laid at the door of Jew or Gentile, American or Foreigner and which will not be remedied solely by race or religion. This is an existing economic problem developed, fostered and encouraged by modern standards of living for which *all* of the *people* are equally responsible. Considering these items individually, it seems as if nobody is making money and that everything is as rosy as it should be.

How does all this affect the sick individual who has to pay the collective charges, and how can they be reduced? Let us follow the simple process of a sudden sickness invading the home of a family with an earning power of, say \$100 per week. It may be the head of the family, the wife, the child or a dependent member, who is stricken. At first, self-medication is resorted to. That, of itself, is an expensive habit, for it delays recovery, often intensifies the disease, and causes loss of time. Dr. Shuler, Editor of Ladies Home Journal, speaking editorially, concludes his remarks with the following: "Much of the high cost of medical care is not due to the doctor, the system of treatment, excessive fees in nursing, hospitalization, or medical work. It is due to our own improper demands, and to our expensive and usually ineffective attempts at self-medication." This self-medication failing, a doctor is called in. It may be the family doctor or a neighboring physician. If he is able to cope with the disease early, the final cost is indeed very small. Should the illness become more complex, or the family panicky, a consultant is demanded, a nurse may become necessary, and thus the cost is immediately and enormously increased. The nurse in the home gets \$8 per day and \$8 for night duty, plus food; the consultant from \$10 to \$150; incidentals \$2 to \$3 per day; and the poor doctor, who takes all the responsibility and blame, \$3 to \$5 per visit. Let us suppose that the disease is pneumonia, which can be treated in the home and which may last 4 to 5 weeks. The approximate charge of the attending physician would not be more than from \$100 to \$200; the nurses would get from \$400 to \$500; the consultant, the laboratory fees with drugs and

incidentals, may be anywhere from \$50 to \$300, according to the size of the fee and the ponderosity of the consultant. Thus, a simple case of pneumonia becomes an inordinate drain which takes nearly  $\frac{1}{4}$  of the family's yearly income. Suppose that this patient is treated in a hospital where private rooms can be had at \$7 to \$14 per day. Immediately, and often without real necessity, numerous laboratory examinations are made, transfusions may be resorted to, oxygen chambers and what not are required, and there you would have the expense more than doubled. When the day of reckoning comes, all these demands and requisites are forgotten and the cold bill is all that remains. I have a few of such actual cases in mind, one of which I will cite here as an example.

A young married woman with a child, whose husband has today an earning capacity of \$75 per week. She was ailing for a few weeks till, finally, an acute intestinal lesion developed. She was then more or less acutely ill for 10 weeks, 5 of which were spent in a hospital and 5 in her home. The total cost of this illness was more than \$5000. The nursing fees exceeded \$1150 without the cost of meals; the hospital charges were \$600 for the 5 weeks; the consultants \$400 (1 New York man charging \$150 each for 2 calls); a minor operation, with subsequent difficult attendance, was \$750; 4 transfusions with donors cost \$750. The original attending physician, who carried the patient through the entire illness, including attendance before full development of the disease, received about \$650. I ask you, in all sincerity, to place the blame where it belongs.

Hospitals, as I said before, have developed into institutions of magnificence. In their newer building programs they vie with each other in the construction of imposing edifices stretching out over acres of ground, marble halls, sumptuous attendants, complicated office systems, social service departments, and all the multifarious dogfangles of big business without the necessary intelligence, efficiency and business sense to properly conduct them.

Winford H. Smith, Director of Johns Hopkins Hospital, says in the Saturday Evening Post: "It all seems very complicated, but

actually the situation presents the same sort of disorderly picture that has induced our leading industries to engineer better organizations for themselves. Whenever an industry does this, the usual results are better service and lower prices to consumers and greater rewards for those engaged in the industry. In spite of the fact that the medical care of a nation never can be strictly a matter of buying and selling, nevertheless, there is no field of activity today which is in sharper need of better coördination than medical service."

Such hospitals have private rooms costing from \$7 to \$14 per day. As soon as a patient enters, the entire armamentarium begins to function, until the final cost averages about \$20 per day without doctor's fees and nursing. In spite of all this, there is not 1 hospital in this country which can compare in equipment, design for comfort, convenience and service, with modern hotels and yet their cost is far in excess. The hotels *make* money and the hospitals *lose*. Why? In my humble opinion—and this notwithstanding our so-called authorities on hospital construction—hospitals should go in for height instead of width. A 20-story building on a 150 ft. lot is of greater convenience, and much less expensive to conduct, than an 8-story building spread out over several acres, with wings and outhouses and a large overhead. The cost of maintenance is thereby reduced. Fewer employees are needed, and time and labor are saved—to say nothing of the lower property cost. I believe also that the daily fee for rooms should include, free of charge, all routine examinations because, to my mind, no hospital room is worth \$14 per day unless such services are there, easily obtainable, and ready for use free of all cost.

Let us take the nursing problem as it exists today. A student nurse after 2-3 years of study, for which she is now paid and for which *she* ought to pay, is graduated and is then immediately available at the regular price of \$7 to \$8 per day. This same fee is charged the patient who pays \$7 per day for a room, as well as to the one who pays \$14 per day. Why? Would it not be more equitable if recent graduates, obviously lacking in

experience and knowledge, would for the first year or so confine themselves to work requiring less exacting duties and to those patients who, by necessity, go in for cheaper accommodations? There are mighty few doctors that I know of who can earn \$8 per day the minute they enter private practice. How long it takes to make a living after 5-6 years of ardent study, all of us know. Remember that the average income of a doctor in the final analysis is around \$3000 to \$4000 per year.

Now, the man, the family doctor, who innocently shoulders the brunt of this economic question; the backbone of the medical profession; the bulwark upon whom the patient and the family lean; where does he come in? He finds his way, day or night, into the sick-room. No 8 hours or 12 hours of work for him. There is no special day doctor nor night doctor. Painstakingly and thoroughly he devotes himself to the patient, watching, paving the way toward recovery; spending sleepless nights, thinking of possible omissions or probable improvements; and when the day's work is done he may or may not get \$2 to \$5 per visit.

As it strikes me, this is no doctor's problem. This is a development of the times; and the cost of medial care, which one writer claims to be "unconscionably high" is just a concomitant of our present mode of living. *Everything is unconscionably high.* Labor, rent, automobiles, commodities, clothing and amusements are high. Even dying is high. I have heard nothing said about the high cost of being buried. Recently, I saw an undertaker's bill rendered to a poor widow who was left dependent: The coffin (a grey cloth-covered box with silver plated handles) cost \$550 (some where, some time ago I read that the actual cost of such a box was \$50. Two automobiles from our Forest Hill section to the Pennsylvania Railroad Station on Market Street, a distance of about 3 miles, cost \$24. Incidentals (such as embalming, chairs for funeral, etc.) were \$300. How does that compare with the high cost of being sick?

Sickness, of course, is no respecter of persons. Nobody wants it but everybody gets it. When it does come it is a matter of necessity, as well as of pride, to have the best.



When all is said and done, the doctor is only working for a living. No doctor ever got rich from his practice and nearly all die poor. A finger is always pointed at the financially successful doctor but everybody is supine or enthusiastic when a business man, a financier or a bootlegger, gets rich. No one seems to expect it of a doctor.

Now what can I offer as a remedy (if there is such a thing as a remedy)? None of the many panaceas which has been offered have solved even the beginning of the question. Group clinics, pay clinics and health institutes, or what not, are only experiment stations which have led us nowhere.

The Journal of the American Medical Association says editorially: "The problem of providing the public with the best medical care at a price it can afford to pay has not been solved in the first 3 years of the 5 year experiment of the Committee on the Cost of Medical Care. It has not been solved by the establishment of 60 or more group clinics in the United States, by the notable success of one of these clinics or the failure of many others. It has not been solved by the establishment of pay clinics in connection with hospitals, pay clinics established by universities, or commercial organizations organized by business men employing full-time physicians. It has not been solved by contract practice, by health insurance schemes, either compulsory or voluntary, nor by the individual general practitioner."

First of all, it is my impression that the doctor gives too much of his time to clinic work without a direct financial remuneration. No one can afford to spend half his day in clinics and hospitals free of charge, and expect to make up the deficiency in the other half. If he were paid for such clinic work, such an increase in income would tend to reduce his price for services to private patients. Dr. Charles Gordon Heyd made a similar statement in a recent address and I am firmly convinced that the time is very near when this will come to pass. Why should a doctor give part of his time free and then struggle to make a living during the remaining hours? Why this continuous hypocritical standard in the name of charity?

Does any one expect it from a lawyer? When a poor criminal is defended the Courts immediately see to it that his assigned counsel is properly paid. The state surrounds itself with all the safeguards at its command, pins the doctor down to strict and stringent conduct, makes laws and edicts to keep him in line, and then the people expect him to go out and give most of his time to charity. State medicine is not the crying need, but *state subsidy* of hospitals might be more to the point. Groups of specialists combined under one roof may help to reduce the cost of a complete examination by reason of a fixed fee for all. The oft repeated demand that the individual doctor should have a fixed fee for rich and poor alike is not feasible nor equitable. This is a question dependent upon the human equation. It is as old as time and is only presented as a criticism by the wealthy and an attempt to place the burden of carrying the doctor upon the middle class.

The Journal of the American Medical Association says editorially, in reviewing Mr. Evans Clark's paper in the *Atlantic Monthly*: "Mr. Clark opposes the plan of charging more to the wealthy than is charged to the poor, notwithstanding the fact that he does not seem to have looked carefully into the basis for such charges. Actually, there is hardly a professional service available today, including that of ministers, lawyers, engineers, dentists and other professions, that does not charge on this basis. One cannot compare the importance of medical advice to a millionaire with the price of a box of strawberries. Apparently no one has raised the question as to why a lawyer will charge a millionaire more for making a will than he charges a man with \$100,000, when the latter insists on distributing his money in such a fashion that the will requires 25 pages more than is required by the will of the millionaire who has decided to give all his money to his favorite friend. After all, the medical profession is becoming a little weary of suggestions for modification of its methods and customs by those who have never taken the trouble to find out those methods and customs, and the history of the reason for their existence."

An outstanding item leading to the reduc-

tion of medical cost is to discourage the demand and the need for out-of-town consultants. This is of paramount importance and requires great courage and perseverance. Every one of you is familiar with the futility of bringing in, at the slightest provocation, some favorite out-of-town specialist who does nothing more than agree with your findings and propitiates the family—for a high cash fee. If our community does not harbor men of sufficient knowledge to help you in your daily work, then we deserve no credit nor sympathy. The man who has spent days on a case and has worked it up from every angle is certainly more able to make a diagnosis than a New York specialist who comes in for 15 minutes.

Writing along these lines, Dr. Wingate M. Johnson speaks, as follows: "The solution of the medical problem of the middle class is, after all, simple. It is for every family to select a physician as its medical adviser. This man should be selected with great care, then trusted so long as he is found worthy of confidence. If the right sort of man is chosen, and knows that he is the absolute guardian of the family health and that he is expected to call in the help of a specialist or a group of specialists when he deems it necessary, he will put forth his best efforts to merit this confidence. His professional pride, combined with a personal interest in his patient, will make him more anxious to get results than any specialists would be. \* \* \*

The modern family doctor is not necessarily a general practitioner, in the sense that he undertakes personally to practice all branches of medicine. Indeed, the modern family doctor is apt to limit his work somewhat; but he keeps so well informed along all medical lines that he is capable of wisely directing those who trust him. Undoubtedly, many patients with obscure ailments will be directed to individual specialists or to clinics; but the family doctor is abundantly able to take care of the great majority of the ailments that arise among his patients. Such high authority as the Committee on Medical Education of the American Medical Association has estimated that a capable general practitioner can care for 80 to 90% of the illness for which people con-

sult doctors. The Committee on the Cost of Medical Care has found that the famous 'upper respiratory infections'—colds, influenza, and their near relatives—alone constitute 62% of the usual disabling illness, with the diseases of childhood and other common ailments to be added. Does this seem as though there is no more work for the family doctor?

\* \* \* The very conflict of opinions as to what is to be done to replace the family doctor argues for his continued existence. The very fact that no satisfactory way has been found to get along without him indicates that he is an essential part of the medical scheme. The medical man who is meant to be a family doctor can never be satisfied with any amount of success in another kind of work. In the present stage of medical evolution, this type of man is successfully adapting himself to his changing environment. While numerous lay and medical writers are penning more or less flattering obituaries of the old family doctor, the modern family doctor is busy making himself indispensable to as many families as he can serve."

There should be a general and frank agreement among the surgeons of every community as to some uniformity in fees for operations. Hospitals should conduct their operations in accordance with their possible income. The hackneyed idea that hospitals spend most of their money for the poor can be exploded by the fact that the poor are being supported by city pay and private donations; hotels are not. Some one facetiously remarked recently that manufacturers give no automobiles to the poor. They would if they were subsidized to do so.

It is altogether destructive to common sense to build institutions which require vast sums for their upkeep, with the hope of collecting such sums either entirely through charitable donations or by excessive charges. Salaries and fees for special services in such modern hospitals are altogether too high for some favored few, a burden which the patient and the community are expected to carry. Hospitals should be built and conducted on hotel plans, the most magnificent of which charge less than a hospital of equal size and capacity and give far better service. Modern hospitals



are often over-staffed, with little consideration as to their efficiency and in such a staff the spirit of politeness and service is woefully lacking. The idea of a white collar hospital, so successfully tried in Massachusetts and now attempted by Mt. Sinai Hospital in New York, deserves emulation and imitation.

While all these things help materially, they are not the crux nor a panacea but only a short step toward alleviation of an existing condition.

Nurses, in the vast majority, are over-paid. Consider the requisites of an office assistant in a big business house, who is able to demand \$50 or more per week. Every one of you has had an opportunity to judge this. Nurses should be paid on the basis of a graduate wage till their fitness and ability entitles them to a maximum of \$7 to \$8 per day.

By and large, the high cost of medical care is not, in my judgment, a problem for which the doctor is in any way responsible. It is a product of our economic development, which is especially indigenous to the United States of America. We thrive on high prices. The trades unions want as high a wage as they can get for their members. The manufacturers, in turn, add it to their cost and by the same token get all they can. Amusement purveyors charge all the traffic will bear. The

farmer, the middleman and the retailer multiply the original cost till a quart of skimmed milk costs 18 to 20 cents. And so it goes on, *ad infinitum*, until the doctor, as a member of society with a meager income, finds it also very difficult to make both ends meet. Of all the members of any profession, the medical men, individually and collectively, are the least avaricious. If there is such a thing as the high cost of medical care, the responsibility is not theirs but it is rather a product of this age, part of our entire economic structure, and the remedy will, therefore, come only through readjustment of all of the factors which constitute our present political status.

In short, we come back always to the personal equation. The demand always creates supply. If the people want high priced specialists, high class hospital services, high priced nursing, it will be furnished to them. There is no use prating about excessive expenditures and exorbitant charges, when they themselves believe that the grade of service is in direct ratio to its cost. The doctor himself is, as usual, an innocent victim of all this cabal and time will so prove it. To paraphrase those golden words of the "Peerless Leader" and "Orator of the Platte"—"You cannot press this crown of thorns upon the brows of the doctor; you shall not crucify medicine upon a cross of gold."

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## THE LOVE OF BOOKS

(By James R. Clemens, in the Saturday Review of Literature.)

Happy he  
Who, in his home at night,  
Finds in his books delight,  
And sweet society;

Whilst he who sees no profit in their use,  
Will live a fool and die as great a goose.

At my call  
Great Shakespeare and his fellows  
Stand ready, like my bellows,  
For service menial;

Thus kingly do I sit and at mine ease,  
Whilst they, when summoned, do their best to  
please.

Who pines more  
For earthly rank and pelf,  
Than good books on his shelf,  
Is like a sycamore;

A tree so plagued by density of shade,  
That well-intending light shrinks back dismayed.

With a book,  
A man is richer far  
Than kings and princes are,  
Though he no cities took;

For in good books a vein of thought is found,  
Which, mined, exhaustless gold yields from the  
ground.



*For*

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# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

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## AUTOMOBILES MORE DEADLY THAN WAR

Under such a title we read a paper at the Tristate Medical Conference in December 1930; reviewing the possible causes of so many automobile accident fatalities and injuries, and offering a plan of action on the part of motor vehicle licensing authorities which we believed would diminish, at least, the number of such accidents. In our report to the State Society, in June last, special attention was directed to this matter and the House of Delegates passed resolutions authorizing the appointment of a special committee to urge upon the Commissioner at Trenton adoption of the plan proposed. President Hagerty has appointed the committee and doubtless action will follow in due time. While traveling during the summer vacation period we were interested in the number of newspaper items appearing in various foreign cities, giving further evidence in support of our statement that a very large proportion of the so-called *accidents* are the direct result of permitting such dangerous machines to be driven on our city streets and other public highways by persons utterly unfit to be trusted with such death-dealing apparatus.

Two of the newspaper items referred to were of special interest: the first because its heading set up an association of ideas and reminded us of our own previously used title, and then we found that the content of the article, as well, bore a strong resemblance to

the line of argument we had developed; the second because it was a letter written by a physician, and, for the first time—in so far as we are aware—challenged the right to use the word “accident” in association with many of these disastrous events.

The Paris edition of the New York Herald Tribune, of September 9, carried the following editorial:

## OUR MILLIONS OF JUGGERNAUTS

It is good news that United States Senator James J. Davis, of Pennsylvania, and John Barton Payne, Chairman of the Red Cross Society, have given emphatic warning of the inexcusable frequency of automobile killings. The suggestions that Congress appropriate money for the preparation and exhibition of moving-pictures illustrating the folly of carelessness and indifference in face of this constant peril, is excellent, but it does not attack the evil in a sufficiently radical manner.

Few people seem to take account of the fact that today millions of automobiles are rushing along country roads and through city streets at rates of speed exceeding that of the ordinary local railway train. Would the public that tolerates this abuse of privilege endure for an instant that railway companies should in like manner usurp the almost exclusive use of our highways and byways? Why, then, should it be permitted to the owners of automobiles? It took many years of effort on the part of the public to compel railway companies to respect human life by adequate precautions at road crossings. The automobile danger is greater because more frequent and because it is due, in innumerable instances, to lack of competence or the heedless mania for speed of Torri, Dick or Harry at the drive-wheel.

Deaths by automobile accidents in the United States in 1930 numbered 32,500; exceeding by 1246 those of the previous year. Since 1920 such accidents have increased 149%. Said Senator Davis in a radio-distributed speech: “I know of no subject more important to our nation than safety as applied to the conservation of life and limb. During 18 months of the World War, 50,510 members of our army were killed in action or died

of wounds, but during the last 18 months, 50,900 were killed on our highways by automobiles. In the 5 years from 1916 to 1920 death from highway accidents totalled 52,760; only 10 years later—from 1926 to 1930—this figure had mounted to 141,000. It is estimated that the monetary loss to the country by traffic accidents in 1930 alone amounted to more than \$2,000,000,000."

Modernized warfare is appalling beyond all power of expression. Must it now be recorded that peace in a given time takes a greater toll of human lives than war in an equal period?

On the very same day, the Paris papers published a United Press report containing the following statement: "The Labor Day week-end sustained the loss of 123 lives in the United States; of which number, 94 persons were killed in automobile accidents, 12 in aeroplane crashes, 16 were drowned, and 1 death was caused by lightning. During the same period of time there were, in addition, reports of 432 persons injured seriously by automobiles."

With reference to employing the word *accident* in association with automobile killings, the London Times published at about the same time a letter signed by Dr. S. F. Crowther-Smith, reading as follows:

Under the heading *Road Accidents* our papers publish long lists of disasters on the road, of greater or less severity, this state of things being, apparently, now accepted as an integral part of motoring. The word, *accident*, which implies unavoidableness, is used to describe these occurrences, and thus their true nature is obscured. In the vast majority of cases they are the result of definitely dangerous driving, and as it is the duty of anyone involved in such "accidents" to inform the police, a brief inquiry on their part would, in the majority of cases, fix guilt on one or perhaps both of the parties concerned; prosecution should follow, and licenses should be cancelled. I am aware that this is done in obvious cases, but, in my opinion, the law is not carried far enough, for in nearly all such cases there is quite definite evidence for prosecution. By this means offenders would be gradually removed from our roads, and, apart from this, the fear of losing licenses after nearly every "accident" would act as a real deterrent.

It is quite possible that coinage and application of a word more fittingly describing such killings—than does the word *accidental*—would be helpful in bringing the authorities and the public to an appreciation of the serious nature of the situation; certainly such an effect might be anticipated if the word chosen for such use carried with it an implication of *murder guilt* on the part of some one involved in the catastrophe. At the present time news-

papers announce the death of a citizen as the result of collision of 2 automobiles, and, possibly, name the occupants of those cars; or announce that a child at play in the street, or an elderly man or woman crossing the driveway, was knocked down and killed, by a passing automobile. If the person killed, or who later died from injury thus received, happens to be a citizen of some prominence in the community, there *may be* an accompanying statement that the automobile driver is being held for investigation "on the technical charge of manslaughter"; but we seldom hear of the matter again. If, on the other hand, the victim was not well-known, even the promise of an investigation is not presented. In either case the published story usually leaves the reader under the impression that the *accident* was unavoidable, and no one was more than "technically" responsible for the sudden termination of life for a human being. If, instead of these flippant accounts conveying the impression that no one in particular was responsible for the killing, the newspapers and official reports would merely change the form of public statements so that the killing was made to appear as a murder for which some one was going to be held responsible, the affair would assume an entirely different status; and we believe that would help very materially in reducing the number of such *accidents*.

We do not mean to say that the persons killed in such manner are always innocent victims. Not infrequently the pedestrian who is thus injured or killed has been guilty of contributory negligence or worse. So, too, when the occupants of one car are injured through collision with another vehicle, the fault may have been partly or entirely on the side of the party hurt. In general, however, that is probably not the case; the reckless, irresponsible, unfit driver is apt to escape injury but, inasmuch as the accident results from his bad driving, and a human being is by his action deprived of life, he is in fact a murderer and should be tried on a charge of manslaughter—not tried for the comparatively simple offense of "reckless driving".

We hope this aspect of the question will



be laid before the proper authorities for consideration, and we pleadingly call upon every member of this Society to again read the discussion published in our Journal of February 1931, pages 148 to 158, and then to use whatever influence he may possess toward the establishment of rules and regulations which may, to some extent, prevent issuance of drivers' licenses to persons physically unfit to be trusted as chauffeurs. You can offer your services to the committee or act independently, but, in whatever manner you please, give as much help as possible toward the diminution of automobile killings.

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#### PRELIMINARY ANNOUNCEMENT REGARDING POST-GRADUATE MEDICAL COURSES

The Editor is in receipt of advance information concerning the financing of the State Society-Rutgers Post-Graduate Medical Courses for the coming year. Because of moneys recently made available from state funds, courses similar to those given during the years 1930 and 1931 will be offered in 1932 at a reduced fee. It appears now that it will be possible to offer such courses at \$15 instead of the \$30 fee heretofore charged. The good news that these courses of instruction, devised by a special committee from the Medical Society of New Jersey, and offered to physicians of New Jersey through the University Extension Division of Rutgers, are to be had for the very small price of \$15 is certainly something pleasing to be passed along to our members.

Last year, more than 90 lecturers, prominent in national medical circles, were engaged to lecture to nearly 400 members in 19 group centers throughout the state. It has been suggested that this third program shall include most of the subjects lectured upon last year: Newer Drug Therapy; Gynecology; Obstetrics; Cardiac, Vascular and Renal Diseases; Pediatrics; Gastro-Enterology; Fractures; and General Medicine; but that remains open for further consideration.

The committee members from both institutions are now actively engaged with plans

for making the coming season's offering not only cheaper but better, and with the experience gained by 2 years of successful work and careful observations, it is expected that the program to be announced next month will be of exceptional interest.

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#### WORKMAN'S COMPENSATION LAW

In recent issues of the Journal, we have commented editorially upon the special committees recently appointed to investigate certain economic problems which have been disturbing the profession, and in the September Journal we directed attention specifically to the provisions made for study of the Workman's Compensation Law.

Ex-President Sommer has gotten his associates together; gotten each of them to express his views concerning defects in that law, or in its application; has received from members of the committee, or from other sources, suggestions for improving matters; has provided each committee member with material for study—with a view to an early conference upon the questions involved; and, as may be judged from all this, he is, with the hearty coöperation of every member of his committee, striving energetically to solve the problem under consideration. On October 14, Dr. Sommer entertained the committee, and the President, Secretary and Executive Secretary of the State Society, at dinner in the new Waldorf-Astoria hotel, and the group sat until a late hour discussing various features of the law and the many complaints heard.

Among the points most frequently raised, and which were most thoroughly discussed at the above mentioned conference, were: The right of an injured employee to choose his own physician; the injustice of depriving an injured workman of the care of his personal physician, by removal to a hospital or clinic conducted by the insurance carrier; the "lifting of cases", and transferring of patients, sometimes even to places outside the jurisdiction of the Compensation Bureau.

If you have complaints to make or suggestions to offer, *now* is the time to present them to Dr. Sommer or Dr. Morrison.

## Special Article

### TRAVEL TALK

#### Recent Visit to the Grenfell Mission on the Labrador

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, New Jersey

In order to appreciate, to the fullest extent, Dr. Grenfell's Medical Mission on the Labrador coast, one must try to visualize what was the condition of the poor fisher folk who lived there when Dr. Grenfell, 40 years ago, had his first inspired desire to come over and render to them medical and surgical assistance. Probably there were few places under the Arctic circle so barren of the comforts, or even the necessities of civilization. Labrador was, truly speaking, "the poor relation" of mankind. The people, a hardy, but God-fearing, population of fishermen and their families, were located in sparsely settled and widely separated communities on a wild, barren and rocky coast some 1500 miles in extent. The high, bare cliffs, almost without vegetation, dropped precipitously into very deep water whose summer temperature even is between 40° and 43° Fahrenheit. The population was small in winter but in the summer was largely augmented by a floating population of several thousand men, from Newfoundland and others of the more southern provinces, who were lured by the remarkable fisheries for cod, salmon, halibut, herring and the seal; and further enticed by the fur-bearing native animals of the interior, in order to trap which one must endure the rigors of conditions absolutely arctic in character.

Often many hundreds of miles from any medical assistance, with their little channels or "tickles" frozen solid during 7-8 months in the year, the only means of transportation by dog-drawn "komatik" or dog-sled, they constantly faced blizzards and a temperature often getting to 40° or 50° below zero, and one wonders why human beings wished, or were even able, to endure such hardships. But, one might as well ask why did the Esquimaux choose this and even a more northern habitat? Why did certain tribes of the great race of North American Indians travel and even live in far more northern lands? The answer seems to be that all animal life requires sustenance. The Indians hunted the caribou, the Esquimaux the bear, musk ox and seal, and the forbears of the present Labrador population found the rivers and sea

simply teeming with salmon and cod; and on the land were many animals whose flesh and fur supplied their needs in a country where laws and vices (before civilization) were few. Although the people developed an endurance to hardship almost impossible to imagine, and became skilled mariners of the deep, where courage meant life itself, almost unendurable misery befell them when sickness or accident became their lot. Strange to say, tuberculosis was a grim reaper that annually reaped many a harvest even in that clear, cold climate. This, one can understand, for they had a diet consisting of fish for breakfast, fish for dinner, and fish for supper; vegetables and fruit were absent, dear, or scarce; a family was fortunate if it could afford a barrel of flour for the winter. The story of the vitamins was a closed book. Hygiene was unknown.

Wilfred T. Grenfell was a sturdy, athletic English boy. After finishing at medical school he served as intern in the London Hospital under the great English surgeon, Sir Frederick Treves. It was a fine schooling for his future life's work; because, to the London Hospital came the sick, the blind and the halt of the great and smelly slums of the crowded city of London. There are no private rooms or private patients in that hospital. The beds are free. It was a wonderful arena for a man who desired to make his life work the work of the *Master*. Sir Frederick told Dr. Grenfell of the suffering of the sick in the Fleet of the North Sea Fisheries, and young Grenfell volunteered to become the first "resident" physician to several thousands working the little fishing boats, and earning a bare existence in a wild world of cold, of wind and of waves. To catch the right spirit, the romance, and to appreciate the great hardships of this job, one must turn to Dr. Grenfell's own autobiography. It is more fascinating than any novel.

The writer does not know how or when the appeal to "The Labrador" first came to Dr. Grenfell, but in 1892 we find him crossing the great Atlantic above "the roaring forties" in a small sailing ketch that almost foundered on the way. To the natives, his coming to the coast was almost "too good to be true". For heart stirring accounts and details, one must read Dr. Grenfell's own books, which are many.

Battle Harbor at that time was the center of his work. This little station, which even now shelters only a half dozen permanent families, was, we know, the first place of civilization from which Peary sent the announcement that he had conquered the North Pole. It is also halfway between New York and London. There, Dr. Grenfell started his first hospital and from there he answered many a



midnight summons to take his faithful dog team on a 40 or 80 mile journey, and render succor to some distant sufferer; often facing an untracked way in an arctic blizzard, and sometimes arriving in a condition almost as critical to himself as his patient. In the first few months he treated 900 patients. Now, one can visit a whole chain of hospitals and nursing stations along the Labrador and North Newfoundland coasts! Alas! The hospital building at Battle Harbor was totally destroyed by fire 2 years ago, and when the writer faced a cold driving wind and rain, which almost swamped the little boat that took him from the steamer "New Northland" to the shore (as a ship of almost 5000 tons cannot reach the pier), he found, after clambering over the slippery rocks, a number of hungry Esquimaux dogs, a few pathetic looking fishermen's houses, and at last, under a shelving rock, the nursing station which at present is the sole but important station there of the "International Grenfell Association". Since the fire, there has been no doctor left at Battle Harbor, but 10 miles further along the coast one is located at Mary's River. The trained nurse in charge at Battle Harbor has an old (a very old) fisherman's cottage for her own home and for her patients who sometimes crowd the little two-floor building to its very rafters. She was a young girl from Connecticut and, besides running the dispensary and little operating room herself, she did all the midwifery and the cooking, nursing and housework, and managed to keep warm and cheerful all alone with her one little stove for the whole establishment. She was young and sturdy, apparently about 25 years of age (it is dangerous estimating such things in femininity). The cold, driving rain, while soaking us completely to the skin before we again reached the ship, prevented, and this is said with much regret, taking any photographs or even exploring with any satisfaction this interesting station.

The hospital at St. Anthony is the pride of the Association, and they may well be proud of it. St. Anthony, before Dr. Grenfell's coming, had only a scant half-dozen fishermen's houses. Now, we find that the Association has built a modern hospital, designed by William Adams Delano, the noted New York architect; an orphanage as big as a whale (and about as beautiful); a dry dock which is a great boon to the fishermen; the Wilfred T. Grenfell School; a clothing store; and a separate office for managing the Association's many activities.

It was a cold, windy, August day when we walked from the ship the short distance to the hospital. One is at once struck by a very

remarkable sight. There is a flag pole at each end of the hospital, and on these fly flags at equal heights; from one pole the English flag and from the other the American. We are told that there is no other building in the world where this can be seen, as, remember, they fly here *at equal heights!* International law demands that the country of occupation should have its own flag fly at higher elevation than that of any other nation. We believe that at the request of Dr. Grenfell the King of England gave the International Grenfell Association a special permission to put the "Stars and Stripes" on a level with the "Union Jack".

The St. Anthony Hospital is important not only for St. Anthony and the "I. G. A.", but for all these lonely northeastern provinces of America. At the time of our visit it had *40 beds and 60 patients*. Dr. Charles S. Curtis, from Boston (Harvard and Boston City Hospital), came here to work one summer 8 or 10 years ago and has stayed ever since. His service is a most active one. When we paid him a visit there were 11 patients convalescing (at one time) from the Albee spine graft operation; a woman (a pure Esquimaux) had just had an abdominal dentiginous cyst removed, and as she lay in one of the sunny beds facing the sea, she smiled at us with her round Mongolian face, and her large black eyes spoke eloquent words, although she did not understand our language. In this hospital they do tonsillectomies in batches of 10-25 in one morning. Dr. Phinney (Cincinnati), the oculist of the Association, had just performed successfully over a dozen cataract operations. The management has been able to cut the cost of patients per day down to \$2+, which, contrasted with \$6 + for private patients in Montreal, shows good management. One cannot leave the hospital without noticing the wonderful cut flowers in almost all the rooms. It has its own greenhouse, which has most thoughtfully been donated and supported by some kind patron of the "I. G. A." (A Garden Club).

One must not leave St. Anthony without visiting the orphanage, where about 100 little waifs are fed, housed and taught. These little children (some of them Esquimaux) can be called absolute rescues. When the parents die—many of the fathers of the orphans having died at sea—the children have no place to go, as it is with great difficulty that other families can even feed their own. So, in the orphanage, these little children are given that nourishment and care which saves them from tuberculosis, *whose toll on the coast is about 60%*. Dr. Grenfell has great hopes for the future of Labrador, through the children.

And he is right. Read these words from one of Sir Wilfred's diaries:

"I had been summoned to a lonely headland, 59 miles from our hospital at Indian Harbor, to see a very sick family. Among the spruce trees, in a small hut, lived a Scotch salmon fisher, his wife and 5 small children. When we anchored off the promontory we were surprised to see no signs of welcome. When we landed and entered the house we found the mother dead on the bed, and the father dying on the floor. Next morning we improvised 2 coffins; contributed from the wardrobes of all hands black material enough for a seemly funeral; and later steamed up the bay to a sandy stretch of land, buried the 2 parents with all the ceremonies of the Church, and found ourselves with 5 little mortals dressed in black sitting on the grave mound."

But there were other places calling; and our steamer took us to 2 other stations besides Battle Harbor along the Labrador coast. At Mutton Bay, the "I. G. A." is well established. Fortunately, there the weather was fine, and on the bare rocky shores we were greeted by a number of sturdy looking Esquimaux huskies. These dogs, mostly wolf, have nothing to do all summer, and their keep, so essential for their winter's hard work, is some drain on their owners' pockets. They never get quite enough to eat and the presentation of a bone is the signal for a free-for-all fight. One huge, beautiful, snow-white dog came up to the writer and put his cold nose confidently in the hollow of his hand, and waved his big bushy tail—a tail which is carried as a huge plume high in the air when the dog is in action.

While there is no hospital at that point, there has been established a nursing home and dispensary under the supervision of a black-eyed, little, trained nurse who keeps her cottage in a state of spick and span cleanliness that is a pleasure to see. She had one of the native girls for her assistant, and she (the nurse) remains at the station all winter. It surely must then be bleak and shut-in to an extreme degree. Like all of the Mission workers, her little face shone with the joy of this altruistic labor; keen in the delight of the service she was giving "without money and without price". When questioned, she belittled all her hardships, and pointing to her small stove, she said, simply, that she hoped it would keep her warm during the coming winter, long spells of which make it almost impossible to get any outside help. There, one can buy of the natives high Esquimaux sealskin boots for \$2.50 (a really great bargain); as hard as boards when dry and not in use, but a soaking in warm water will make them as soft and pliable as kidskin; and if you wish to wear 6 pairs of socks, they will accommodately

stretch themselves and really be most comfortable.

Our next stop on the Labrador was at Harrington, and there we had a surprise; finding a well equipped hospital. While we were there, the Mission oculist, Dr. Phinney, was holding a clinic, and a long line of expectant patients gave evidence of the sincere appreciation of his services, which every summer he comes all the way from Ohio to donate. The rocks about the hospital were covered with codfish, drying in the sun. A young man, a native, who was "making them", spoke rather discouragingly about the season's small catch and the low price of fish. He got only \$2.50 a quintal, dry (112 lb.), saying that the labor of "making" them was far greater than that of catching. He predicted a pretty tough winter for all hands, and when asked how much he was able to lay up in cash, gave a twisted smile and said he never could get ahead. He was a sturdy lad, about 22 years of age, with a fine, intelligent face. He was skilled in all the lore of the coast, navigating his own boat in such weather as is seen only above the roaring forties. After September, the fishing is over. One could only think what a fine hand he would be on a yacht; or a most reliable chauffeur for someone's car. But, one of the great benefits bestowed by the Grenfell Mission on these people is, the sending of just such lads to the States, to industrial schools where they are taught mechanics; learning to be electricians, plumbers, masons, carpenters, etc., with the understanding that they return to Labrador after such schooling (which over 80% actually do), and thus give their native land the benefits of their learning and skill. Dr. Grenfell takes the greatest pride in the fact that the hospital at St. Anthony, a model of its kind, *was entirely built by such labor!*

It was our regret that Dr. Grenfell himself was, at the time of our visit, high up on the Labrador coast, in the neighborhood of Cape Chidley, and so we missed the great privilege of seeing him face-to-face. He is now *Sir Wilfred*, as King George knighted him for his great services to mankind, in 1927. Our hope is that most of his very hard work is over, for it is no secret that he is shadowed by "the doctor's complaint", angina. In fact, his doctors have ordered him to keep away from the bleak coast of Labrador all winter. He is rebellious also, we understand, at the demand that he refrain from taking his morning plunge from the fore-castle of his hospital ship. One can readily understand that this is wise advice, when one knows that the temperature of the water, on the Labrador, ranges from 40° to 43°; in fact, we were told that it is so cold that even these hardy fishers



never learn to swim, and when they fall from their boats, if no help is at hand they quickly drown. (The temperature of the water is 32° in winter.)

When over 40 years of age, Sir Wilfred "met his fate" while crossing the Atlantic one summer on the Mauretania, and Lady Grenfell, besides abetting and encouraging him always in his great work, has presented him 3 splendid children—2 boys and 1 girl—the elder boy entering Oxford this fall.

One cannot do better, in closing this long paper, than quote the "Cold Facts" printed by the Association:

"Fifteen hundred miles of coast line, mostly populated by Anglo-Saxons, is served by 4 hospitals, 7 nursing stations, 4 hospital ships, 1 supply ship, 14 industrial centers, 1 orphanage, 4 summer schools, 4 winter schools, boarding and day, 12 centers for distribution of new and second hand clothing (all clothing paid for by labor), haul-up-slip for steamer and schooner repairs, 3 agricultural and animal husbandry stations.

Last year: 14,000 patients treated by hospitals, hospital ships and nursing stations, 500 children were cared for in the schools and orphanages, 2500 women and convalescent and disabled men and boys were given employment through the industrial department; 40 schooners and steamers were repaired in the haul-up-slip. A year-round staff of 61 includes surgeons, nurses, teachers, industrial and social workers. In addition, there is a volunteer staff of 100 during the summer months."

Let it be added that this volunteer staff volunteers not only time and services, but pays all expenses (which come to about \$550 for the season), and that there are sufficient volunteers of both sexes so that the Grenfell Association is able to select only the highest class of young people. These workers gladly do any service. For example, returning on our ship were about a score of collegians who had termed themselves (in great pride) "Waps" because they had spent the summer digging a milelong pipe-line at Cartwright. When asked if they met with any rock, one of these boys answered—"We met absolutely no dirt; and digging a trench 6 feet deep (because the frost goes 4 feet in winter) through solid rock for 1 mile in length is not a lazy man's job!" *Out of 800 applicants this year, about 40 were chosen.*

The young women who come up here for the summer work, giving up a "good time" at Newport, Bar Harbor, or Lake Placid (paying over \$500 for their job), also have no sinecure. Hard domestic service may be just sprinkled in for luck. But, as before remarked, *their faces shine with the joy of service.*

As a final word, let it be said: To few men on this earth has been given the vision, the rare initiative and the immense joy and sat-

isfaction to accomplish, in the name of the Master, so much for his fellowman as has been given to God's true servant—Sir Wilfred T. Grenfell!

NOTE: To some it may be of interest to know that all information about the International Grenfell Association can be had at 425 Madison Avenue, New York City, where thick, warm clothing is much needed, new or second hand, and will be forwarded to Labrador at the Mission's expense. Should one wish to verify these facts, and see the work, the Clarke Steamship Company, 10 Dominion Building, Montreal, Canada, will send folders telling about the delightful summer cruises to The Labrador.

## Medical Ethics

### SUCCESS

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, New Jersey

*"It is not our cheap victories in life that measure our status, but how we meet its vicissitudes."*

This subject has been written about so often that it is almost trite. But the man is rare who denies its desirability. The definition of the word differs with different people and in different lands; and when it is obtained one may not know what to do with it.

To a doctor, the word is generally meant to indicate a large practice and an abundance of this world's goods. And yet, many of us can think of several doctors who had attained to this very state but went down to their graves "unknown, unhonored and unsung". A successful life implies more than the acquisition of money. Did not Al Capone scoop up a nice little pile? In his special line, his friends considered him a little Napoleon of Success; nor was his downfall only measured by his crimes. If he had never stepped outside the law, his psychology alone, in due time, would have laid him low. A whole lot depends upon what *standard* of success we seek to obtain.

Sir Thomas Lipton was for 30 years the *unsuccessful* seeker for the America's cup, the blue ribbon of the whole yachting world. Yet, in defeat he was successful. By an unusual complexity of personal talents and qualifications, Lipton drew all men to him and died a successful man.

Once in several thousand years, a very great man is born. Was Christ successful? Those who saw Him die on the cross would not have said He was. Emerson, "the wisest American", often lacked the comforts of this life, and when years ago he lectured in the town where the writer lives, just 18 people attended

his lecture. Was Emerson a success? Read now, after all these years, a few of his sayings. Like wine, they improve with time. "Orientalism has long thought it majestic to do nothing; *the modern majesty consists in work.*" (Italics mine.) "Let him know that, though the success of the market is the reward, *true success is in the doing.*" (Italics mine.) And, speaking of a successful man, he warns as to the perils that attend success.

Naturally, we all consider Edison one of the world's most successful men. But his most unusual characteristic was his utter forgetfulness of success when his mind was at work. Never lived a man to whom money meant so little if it did not enable him to better complete some one of the objects, ambitions or ideas that, like a southern tornado, were always swirling in his mighty head.

Our truest success, however, comes when, in spite of defeat, we rise superior to our vicissitudes, be they bodily or material things!

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## Esthetics

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### MUSICAL MATTERS OF INTEREST TO PHYSICIANS

During the past 5 years we have used this department of the Journal several times for discussion of music as related to medicine; that is, as of therapeutic value in the treatment of disease, especially nervous affections, or, as of interest or importance to the physician personally, in the sense of recreation, avocation or mere artistic enjoyment. This month we have the opportunity for presentation of 2 items that we stumbled upon during our summer vacation and which we hope will be of sufficient interest to our readers, or of actual scientific value to a sufficiently large number thereof, to justify publication. The first item concerns a curious natural phenomenon and some related laboratory experiments that were reported recently to the British Association of Scientists, at its annual meeting, in London, under the title of "Musical Sands"; the second, concerns "Re-produced Music" as we know it from the phonograph or radio, and deals with the science of acoustics and the physiologic function of hearing, and should, in consequence, be of interest at least to our otologists. In both instances we will quote freely from the London Times of September 26.

#### MUSICAL SANDS

A demonstration of the properties of *musical sand* was given in Section A (Mathematical and Physical Sciences) of the Brit-

ish Association, by Mr. C. Carus-Wilson, at the session on Friday, September 25, 1931, which drew a large attendance of members from other sections to observe the display. In a preliminary paper the demonstrator had pointed out that for many centuries travelers have spoken of the existence of sand which, under favorable conditions, mysteriously produced music. Such musical sands have now been discovered in many places and reported by scientists; as when Professor Bolton and Dr. Julien reported through the Smithsonian Institute, in 1884, the finding of musical sand at no fewer than 74 localities along the Atlantic Coast of the United States. He had personally found such sands at Studland Bay, England, and in many other places.

"It would appear that the effects produced by the accumulations of loose sand were similar in all cases, and differed materially from the sounds emitted by the musical sand of beaches when struck or agitated by artificial methods. He believed that they were due to the rubbing together of millions of clean and incoherent grains of quartz, free from angularities or roughness. Though the vibrations emitted by the friction of any 2 grains might be inaudible, those emitted from millions approximately of the same size would give an audible note.

Mr. Carus-Wilson filled a small bowl with *ordinary sand*, and struck it with a child's nine-pin, demonstrating that it emitted a mere crunching noise, similar to that obtained by scratching the irregular-surfaced binding of a book. Upon doing the same thing with *musical sand* he obtained a musical note, as he also did when scratching the surface of a binding which had minute and regular corrugations. A pen-point rubbed at a certain angle upon smooth glass, and held loosely, was shown similarly to emit an even squeak; it did not produce any similar sound when rubbed across matt glass. A less bulky plunger in the musical sand emitted a higher note, and by adding bulk to the plunger even at the opposite end (by screwing on a bed-knob), it was shown that the note was deeper. Mr. Carus-Wilson declared that with a basin of musical sand and a rolling-pin it was possible to obtain a noise like the baying of a dog. Glass, china, and bamboo plungers, gave good results; cork and rubber, negative results. The vessel was also important. A wooden cup was very loud, and an enamelled thimble gave a decidedly high-pitched note, while the inside of half a rubber ball gave no audible reaction.

The demonstrator remarked that if one continued plunging musical sand for a short time it became silent, and was "killed", probably



because some of the grains were ground to powder, which acted as a cushion against the vibrations. He illustrated this phenomenon by mixing flour with the musical sand, which was then "killed". The shape of the vessel was also important, and he showed how pouring the sand into a flour-pot-shaped vessel made it compact, so that it lost its incoherence and the musical note was not produced."

#### REPRODUCED MUSIC

In the Entertainment Section of the London Times, September 26, 1931, an article prepared by an unnamed correspondent reviewed the results so far attained in efforts to reproduce music faithfully over an extensive radio dissemination, the writer being particularly concerned about the *quality* of the reproduction. With elision of the first paragraph only, we reprint the Times' article:

It is perhaps advisable, to prevent misunderstanding, to remind the reader of some of the fundamentals of musical sound. Sound consists of air vibrations, and the simplest sound is a "sustained pure note". This sound is seldom heard outside the laboratory, but a near approach to it is sometimes got from the lower notes of a flute played *pianissimo*, or the open diapason stop of an organ. Such a note is completely described by 2 characteristics: its strength and its pitch. Pitch depends simply on the number of vibrations per second, or "frequency" as the physicist calls it: middle C of the piano has a frequency of about 250 hertz—that is, the middle C string vibrates 250 times per second. The lowest and highest notes of the piano correspond to about 20 and 4000 hertz, and each octave is of exactly twice the frequency of the corresponding note below.

A much more common sound is the complex note. This—such a note as that of a violin or clarinet—comprises a pure note with the addition of "harmonics": notes of twice, three times etc., its frequency. The lowest note is usually referred to as the fundamental, and governs the apparent pitch of the sound, while the relative strengths of all the various components give the "colour", *timbre*, or "quality". More complicated still is the chord, in which several complex notes are mixed, so that the harmonics are no longer notes just 1, 2, 3, or more octaves above the fundamental, but have frequencies bearing fractional ratios— $3/2$ ,  $5/2$ ,  $4/3$ , etc. Lastly, there are the notes *not* sustained—the drums, explosions, the sounds of speech, and so on; which are defined not only by the characteristics above mentioned, but also by the rate at which they start and fall again to silence.

It is important then to consider what

changes may occur in these various types of sound when they have passed through the complex series of conversions which lead them from the studio to the listener's ear. Just how many are these conversions is not generally realized; by way of an example, the energy passing through the writer's wireless receiver—a typical modern apparatus—is altered in form no fewer than 25 times between its entry as an ether wave and its exit in the form of sound. At any one of these conversions there may be an undesired change, affecting the quality of the final result; and it is the duty of the radio and acoustic engineer to see that this does not happen.

Perhaps the most widespread defect at the present time is what the acoustic engineer calls "restricted frequency range": the extreme bass and treble notes are not reproduced so strongly as the middle register. As has been said above, the piano's lowest note has a frequency of about 20 hertz, and the bass instruments of the orchestra go down to about the same pitch. Some grand organs go even lower. Here, there is something of a paradox; for the average human ear cannot hear below 30 hertz—a fifth above. It would seem at first sight that the lower notes are useless. But this is not so, because these notes, as played, are complex, and even if the fundamental is too low to be heard, the harmonics produce their effect.

It is a curious and very important fact that if the fundamental of such a complex note is completely removed in the course of reproduction the ear still persuades the brain that it has heard it. This is the salvation of many reproducing instruments, for the casual ear credits them with powers that they do not possess. It is a most interesting experiment to reproduce, say, a double-bassoon note of about 60 hertz—3 octaves below middle C—and arrange the apparatus so that the lowest note it will reproduce is first 50, then 100, and then 150 hertz. Although the first change abolishes the fundamental and the second the lowest harmonic also, the pitch seems still the same. It would appear from this that the lowest notes need not, after all, be reproduced—and, in fact, the apparatus of a few years ago, and some modern apparatus, does not reproduce them. But this is a fallacy. Although the pitch is unaltered, the tone-colour suffers. The effect is a reedy or tinny quality which is most offensive to the keen ear.

The result of the defective treble range is of the same nature. The highest note of the piano ( $C^4$ ) is of about 4000 hertz, and is of about the same pitch as the highest note usually played on the violin. But if, as is sometimes the case, the apparatus stops

reproducing at this point, the harmonics are lost; piccolo and violin sound alike. The highest note audible to a young ear is usually 2 octaves above this, in the neighborhood of 16,000 vibrations per second; but advancing years dull the ear to these very high notes. It is usually considered sufficient, even among purists, to reproduce up to 8000 or 10,000 hertz. Apart from the actual limits of the frequency range, there may be other troubles. There may be lack of balance—a progressive favouring of bass or treble within the range reproduced—or some few notes in a particular compass may be over-accentuated.

The second great fault which must be avoided is called *distortion*. It is a change in tone-colour. Strictly speaking, some of the defects discussed in the last section should come under this heading: the decrease or loss of the fundamentals of low notes or the harmonics of high ones, due to restricted frequency range. But the defect to which the acoustic engineer especially applies this name is the introduction of false harmonics. The result is to make a pure note complex, and to change a complex one always in the direction of greater harmonics. Every reproducer has a limit of loudness beyond which this trouble will occur; so that sometimes it may be due to faulty usage of apparatus which is quite satisfactory when not over-driven.

Lastly, comes the question of loudness. It does not seem yet to be fully realized that to get the proper effect of good reproduction it must sound of the same strength as the original. Here one must explode a fallacy. One is often asked: "How is it possible to reproduce a large orchestra in this small room? If it were here, playing at full strength, the noise would be unbearable. Yet you say that one must not reduce the loudness if one wants true results." The reply is really simple. Consider a person in the Middle of Queen's Hall. The sound of the orchestra, *fortissimo*, strikes his ear at a certain pressure. Then that same pressure must be made to strike his ear when he sits a few feet from the reproducer in his home. At Queen's Hall, perhaps, he gets a millionth of the total power within the hall; at home, perhaps, a thousandth; hence the total power of the reproducer may be very small compared with that of the orchestra. But to get the right effect, the power *delivered to the ear* must be the same.

A final word on reproduction in general. If the frequency range were ample and distortion nil, so that every note were exactly reproduced; and if the power be sufficient—still, can the purist be justly satisfied? Here we touch on the elusive subject of *atmosphere*.

The reproducer gives us what the microphone heard—the effect on a one-eared man hung from the roof of the hall—and in our room the sound comes all from one point; we cannot prove by hearing that the violins are still on the left and the basses on the right; we cannot see the conductor's white carnation. So that one must admit a difference. But is the difference a defect? There are some who consider that these last things are distractions, and who prefer the solitary peace of an arm-chair in a dim room, with nothing but the music to think of.

It is interesting now to see how near the ideal we can get in practice. Broadcasting is variable. Such transmitters as the new regional stations of the B.B.C. in England, and some half-dozen or so modern ones abroad, are very good indeed when they send a performance from a not too distant studio or hall. Sometimes a program is sent over an imperfect telephone line, which restricts the frequency range. Sometimes an individual performer will come too near, or go too far far from, the microphone. But as a rule there is never a lack of a program which is practically perfect as it leaves the transmitter. But the best transmission from the broadcasting station will not give good reproduction without corresponding care in the receiver. Only a few people know enough or care enough to insist on first-class quality of results; and since it costs a little more to make a receiver *first-class*, therefore 'the second-class—and worse—sell in larger quantities, which exaggerates the difference in cost. The finest apparatus within the writer's knowledge has never been put on the open market, for just such reasons; but there is, nevertheless, quite a good selection, and it is now possible to build to order, even if not profitable to manufacture in quantity, a receiver which will reproduce all notes from 40 to 8000 hertz, or higher, with no perceptible distortion, and loud enough for any domestic purpose.

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## Collateral Reading

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### WILL OTHER WORLDS AFFECT OUR HEALTH?

From a Parisian paper, *Le Comœdia*, we have abstracted part of an interesting address by an eminent French scientist, M. Leon Lecornu, upon the possibility of other universes affecting the inhabitants of this terrestrial globe; as follows:

"Have the ether waves any influence on our health?

It is certain that this is the case with light



and heat rays, and with ultra-violet rays, as well as the x-rays and the alternating currents used in medicine. As for those used in wireless and in radio, it would appear that such influence, if it exists at all, is absolutely negligible, for even at a very short distance from a transmitting station the energy received is too feeble to act effectively. We need not, therefore, suffer any anxiety on this account.

To hear at all distances is already possible, but we wish to go further and realize television. The moving-picture became a 'talkie'; now we have the reverse problem of turning telephony into television, which we have almost solved. The day will come when, comfortably seated in a closed room, we shall see the inhabitants of the antipodes, as well as hear them speak.

The reverse of the medal is that the enthusiasm roused by great discoveries now scarcely moves us. Besides this is the inconvenience, inherent in all relations at great distances, that, as with Balzac's wild ass' skin, the surface of the planet seems to have shrunk in proportion to the satisfaction of our desires. It is true, of course, that we know only its outer skin. Below that, we should have to travel some 4000 miles before reaching the center. Here lies the kingdom of Pluto, about which we possess only the vaguest information. Jules Verne, Wells, and others have made imaginary trips into these mysterious regions. To attack the problem scientifically we need new processes of investigation at a distance.

In the other direction, that is, away from the earth, we are much better served. Everything indicates that about 300 miles up there is an ionized layer that opposes the passage of wireless waves, and so, increases the horizontal distance that they will carry. Above this begins the void occupied by distant celestial bodies that the telescope and spectroscope enable us to study with daily increasing precision.

But they say that man will never be satisfied with his attainments. The balloon, the airplane, require the air to sustain them. On the other hand, the rocket, thrusting out behind it a train like a comet's tail, is theoretically able to propel itself through empty space. We may thus embark in a vessel provided with rockets and visit the moon, which obstinately shows us always the same face, and then push on to Mars, to Venus, and farther still—always farther. This new mode of locomotion is already baptized: it has been dubbed *astronautics*. The calculations have been made; it remains only to find the necessary capital. We are not told whether the future company will sell round-trip tickets!

Meanwhile, if the investigator, instead of directing his attention to the infinitely large, turns toward the infinitely small, he finds there other marvels. In every atom he divines a central star called the nucleus, surrounded by a swarm of planets, obeying, in their revolutions laws very different from those of celestial mechanics; nevertheless he believes, as a fundamental dogma, that here also the law of the conservation of energy holds. This is not all. The nucleus, despite its prodigious smallness, is susceptible of spontaneous, progressive decomposition. This is the case with radium, which we have been able to attack with radiation that is sufficiently penetrating.

It has been shown that this microcosm contains formidable reserves of energy which in the future we may be able to utilize, and this would be the greatest industrial revolution that humanity has ever known. Will it make us happier? That is quite another question!"

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## In Lighter Vein

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### See America First

"How was the scenery on your trip?"  
 "It ran largely to tooth-paste and smoking tobacco."—Louisville Courier-Journal.

### Didn't Do Right by Our Venie

"Could one refer to the Venus de Milo as the girl who got the breaks?" J. C. M. inquires.  
 Why not? It's an 'armless joke.—Boston Transcript.

### Pass the Potato-Masher

"How much are eggs?"  
 "Fifty cents a dozen—30 cents a dozen for cracked ones."  
 "Good—crack me a dozen."—Vart Hem (Stockholm).

### No Sun-Bather

An Eskimo lady exclaimed, with a smile,  
 "I do not pretend to the latest in style,  
 But you'll have to admit that up here in the cold  
 I never wear bathing-suits you could call bold."  
 —Washington Star.

### Scooting Time

The village doctor was taking a friend for a trip in his car.  
 "I say, look out!" cautioned the passenger.  
 "You're doing over 60 miles an hour!"  
 "Don't worry about that", chuckled the doctor,  
 "I've got the village policeman in bed with rheumatism."—Manchester Evening Chronicle.

### Life's Darkest Moment

Two attorneys, one decidedly glum of countenance, met on the street.  
 "Well, how's business?" the first asked of the dismal one.  
 "Rotten!" the pessimist replied. "I just chased an ambulance 12 miles, and found a lawyer in it."  
 —American Legion Monthly.

## Lighthouse Observations

### DIAGNOSTIC RELATIONSHIP OF PHYSICIAN AND DENTIST

Two interesting articles dealing with this question having fallen recently into our field of vision, and having had personal experience with focal infection permitted to run its course too long a time before giving proper attention to the teeth as a possible source of disease in remote parts of the body, we offer abstracts of those papers for consideration.

At the Annual Meeting of the New Hampshire Medical Society, Otis M. Littlefield, Past-President of the New Hampshire Dental Society, delivered an address entitled "Some Phases of Dentistry Which Should Concern the Medical Practitioner", in the course of which he said. (New England Jour. Med., 203:479, Sept. 4, 1930):

"Probably the most important phase of dentistry that concerns the medical practitioner is the association of dental disease with systemic disturbances. Many articles have been written and several explanations have been offered to show the pathologic sequences in focal infection but I dare not say which one is correct or that any one so far offered is correct, yet all may be correct. However, the point is now reached when clinical evidence is established sufficiently to prove that dental disease does present a focus of infection.

As medical men, responsible for people's health, or restoration to health, you are deeply concerned with any contributing cause of disease. As dentists, being responsible for maintaining dental health or eliminating dental disease, we are just as deeply concerned in relieving or preventing, if possible, chronic infection in our field.

Dental focuses of infection are principally in the alveolus, that is, the damage comes through a chronic low-grade infection of the alveolar process either at the apex of the tooth roots or around the surface of the roots between the apical area and the gingival or gum border. The reason, of course, that this distinction in locality is made, is that in general a different disease attacks each area.

Peri-apical infection is usually the result of devitalization or extirpation of the dental pulp which in either case cuts off a considerable amount of nutrition from the tooth. Parietal infection, or infection around the root not involving the apical area, is usually the result of so-called pyorrhea. In this process of disease, part of the nutrition is destroyed but no doubt to a lesser degree than through the loss of pulp. Pyorrhea is always a chronic disease and while in one form it progresses faster than in another, it is marked by an insidious, persistent, rarefying or condensing osteitis, and even though there is drainage through the pocket formed between the alveolar process and the tooth, it is difficult to believe that such a disease process is not at times a contributing factor of focal infection.

Peri-apical infection presents an osteitis, either rarefying or condensing, but the etiology in this condition is such that there is apparently a slightly greater defense built up to localize the infection. Probably the most common evidence of this defense in the chronic type is represented by the formation of a granulation tissue, termed according to dental nomenclature as a granuloma. At times this granuloma is inactive as a process of

infection but yet it may at any time break down and become an active abscess (not acute, necessarily, but an active chronic abscess). Peri-apical condensing osteitis is very difficult to diagnosis, but from the standpoint of systemic disease is a dangerous lesion. It is dangerous because the blood supply becomes very limited and the defense is almost entirely cut off. While in some cases of peri-apical infection there is drainage through the open root canal, or through a fistula, absorption or extension into the blood stream is abated but partially. With *no drainage* to the surface, infected bone is a very vicious enemy to the human organism.

Alveolar abscesses may enlarge or coalesce and form cysts but these are usually walled off by a layer of bone and are dangerous in that they may develop into malignancy, osteomyelitis or fracture.

Another disease of the alveolus that the medical and dental professions are jointly concerned in, is the fusospirillary stomatitis, or commonly called Vincent's infection. Now, I am convinced that this disease, if at all advanced, and perhaps in every case, should be handled by the physician. He may give intravenous treatment, take a blood test and observe the patient's general reaction, but the patient should be referred or sent back to the dentist for oral treatment. This is being done in the larger hospitals with fairly successful results. With intravenous treatment there is less liability for recurrence, and in some cases the blood test reveals a *specific* infection. The local treatment consists of gently removing the exudate, cleaning so far as possible all debris from the teeth, and applying spirocheticides. Oxidizing agents are prescribed for home use. Sodium perborate is probably most commonly used.

Dentistry for children presents a problem to both professions, principally in the handling of abscessed, deciduous teeth. We, as dentists, are concerned in the normal development of the jaws and dental arch. We realize the importance of retaining these deciduous teeth until it is time for the permanent teeth to erupt in their place. Yet these teeth are often bothersome to the child, and if that child is showing malnutrition or maldevelopment, cervical adenitis, symptoms of chorea, or in any way his general health is affected and draining of the abscess fails to give proper relief, it is considered good practice to take the lesser of 2 evils and extract the teeth. The policy of the public health clinics generally is to extract *all* abscessed, deciduous teeth, but, of course, that is a public clinic where a careful watch or check-up on the child is impossible.

Our chief measures in preventive dentistry are to prevent advanced lesions by frequent examination, possibly more thorough examination to locate and properly fill small cavities, to select carefully our means of restoration in order that they will not be the cause of any further disease. Not long ago, it was common practice to devitalize a tooth to provide a support for a bridge. That is not done today; in fact, it is rare that a vital pulp that can be kept vital is disturbed. When we remove that pulp, even if it is done under the most painstaking method, we are making the tooth a potential source of alveolar infection. It is extremely rare that a dentist today attempts to treat an abscessed tooth. We realize that it is almost impossible to maintain thoroughness in asepsis in the average dental office, so we are compelled to turn to antisepsis and our results are un-



satisfactory in too high a percentage of cases to warrant any attempt at devitalization except in very rare instances."

At the Annual Meeting of the Old North State Medical, Dental and Pharmaceutical Society, held in Wilmington, North Carolina, June 18, 1931, Dr. J. S. Perry read a paper entitled "Coöperation of the Physician and Dentist in the Diagnosis of Disease", and from his remarks we quote as follows:

"There seem to be, according to Hayden, 4 types of dental infection associated with systemic disease: (1) Chronic peri-apical infection of pulpless teeth; (2) pyorrhea alveolaris and pus pockets around partially erupted teeth and reconstructive appliances; (3) chronic pulp infection in vital teeth; (4) residual alveolar infections after tooth extraction.

Teeth with infection around the apices may cause, with little or no warning, involvement of the arteries, kidney and heart muscle. This type of infection is the result of devitalization or extirpation of the dental pulp, and culminates in cutting off a large amount of nutrition from the tooth. When the infection is around the root, not involving the apical area, the condition is the result of pyorrhea, a disease the presence of which should be determined by the dentist. I further believe that, though we know but little about this subject, before sacrificing every devitalized tooth, there should be eliminated every other possible focus of infection. Blum advocates the removal of these teeth only as a last resort and not without having first examined and treated every diseased condition in other parts of the body. Exceptions to this are often made to relieve neuralgic pain caused by malposed teeth. And even in this event, removal of infected and impacted roots often fails to give immediate relief.

There are sometimes found around partially erupted teeth, pus pockets. These, as well as typical cases of pyorrhea, may by bacterial absorption cause much trouble.

The removal of an infected tooth does not always get rid of the alveolar infection, which sometimes continues long after the extraction; a fact that should remind both dentist and physician that roots of teeth are not always the prime source of the trouble. This residual infection, which has long baffled medical science, has been responsible for a number of vague systemic involvements. For detection of these abnormalities of the teeth, the physician and dentist rely upon radiographic findings.

The presence of granular tissue about the roots of teeth often destroys and sterilizes inflammatory tissue. Under these conditions the teeth apparently affected give no pain. This granular tissue, though at times inactive, may at any time break down and become an active abscess, not acute necessarily, but an active chronic abscess. It is here that the dentist realizes other means of diagnosis and resorts to transillumination, vitality tests, percussion and sensitiveness to heat and cold.

The diagnostic value of dentistry as related to the laryngologist is plainly seen in sinus infection resulting from a peri-apical abscess. In empyema of the antrum, the removal of a tooth for diagnostic or therapeutic purposes has proved superior to perforation of the canine fossa.

In the field of ophthalmology, focal infection plays an important rôle in causing iritis, uveitis and neuritis.

In the realm of general surgery, duodenal ulcers, appendicitis, pyelitis, osteomyelitis and Vin-

cent's angina, may be traceable to affected teeth.

The dentist has a peculiar diagnostic relationship to internal medicine, about which I am more concerned than any other branch of the science, because of the close alliance of this phase of medicine with dentistry in affording a common meeting ground for the study of infectious diseases. Among these diseases of obscure origin, especially infections in which streptococci are found, is a type not referable to peri-apical abscess. Rheumatic fever is more often attributed to infected tonsils and sinuses than to diseased teeth.

Chronic infectious arthritis is a pathologic connecting link between medicine and dentistry. It has been definitely proved that the streptococci in root abscesses are culturally and biologically of the same strain as those found in the blood of polyarthritic cases, produced by injection of the streptococcus prepared from abscessed teeth and blood. These agglutination and absorption tests have been successfully performed by Miner on the rabbit. He states that he has cultivated streptococci from 62% of patients with acute infectious arthritis.

There is also a type of arthritis that has been somewhat a puzzle to many of us. This is known as osteo-arthritis and is non-infectious. This form of arthritis involves the bone and cartilage instead of the synovial membrane and capsule of joints as does infectious arthritis. Osteo-arthritis seems to be more often encountered in elderly persons, and occurrence of this disease has led me to note a number of toothless mouths in patients who have, with disappointment, looked forward to extraction of their teeth as a cure for arthritic pain. It has been shown by many investigators that this type of arthritis is non-infectious and cannot be met by the extraction of the teeth.

Abscesses of the lung not only occur after pneumonia and from operations about the nose and throat, but after the removal of teeth. These abscesses could be prevented to a great extent by proper mouth hygiene.

In considering the relation of the teeth to some other medical conditions, our attention is called to stomatitis of mercury poisoning, and the lead line of the gums in lead poisoning. These chemical intoxications are often first seen by the dentist who, because of early recognition, can render a valuable service by reporting the case to a physician.

Among the kidney diseases traceable to peri-apical abscesses are pyelitis and pyelonephritis.

The cardiac diseases, myocarditis and endocarditis, are frequently seen in private as well as hospital practice. The infections of the endocardium are often of the streptococcal origin. These infections are closely related to those of multiple root abscesses.

Graves' disease (hyperthyroidism) is often benefited by the removal of infected teeth; a fact that has well confirmed the relationship between this disease and focal infection.

In fact, the entire relationship between focal infection and internal medicine is of such importance as to draw from an eminent practitioner the statement that nine-tenths of modern practice of medicine is devoted to searching for focuses of infection.

In the opinion of Dr. Joel T. Boone, the dentist as a specialist should be called into consultation as a routine procedure, as is the roentgenologist, bacteriologist, urologist, pathologist and ophthalmologist. He further states that the physician, in his attempts to diagnose and subsequently treat disease conditions, fails to practice honestly and

scientifically if he does not consider the oral cavity as the prime source of trouble in a long trend of symptoms and disease entities.

The diagnostic relationship of the dentist to the physicians in hospitals, is of such paramount importance as to necessitate the presence of a Dental Director on the staff of a well regulated hospital. Dental interns have also been appointed in many hospitals, and their work should be on a par with that of the medical intern."

## Current Events

### NEW JERSEY TUBERCULOSIS LEAGUE

#### Twenty-fifth Anniversary Meeting

The Tuberculosis League of New Jersey completed a quarter of a century of existence and of work, at the regular Annual Meeting held at Trenton, on October 16, 1931, under the presidency of Dr. Joseph R. Morrow, Superintendent of Bergen Pines Hospital, Ridgewood, N. J.

Congratulatory telegrams were received from Dr. Kendall Emerson, Managing Director, National Tuberculosis Association; Dr. William G. Schauffler, Princeton; Dr. John F. Hagerty, President, Medical Society of New Jersey; and Fred J. Hughes, President of the Board of Directors, State Tuberculosis Sanatorium, Plainfield.

Members of the Board of Directors whose terms expired this year were reelected for another term of 3 years: Mrs. Charles A. Bye, Ocean County; Dr. J. Bennett Morrison and Michael N. Chanalis, Essex County; Dr. Stephen A. Douglass and Mrs. G. A. Terhune, Passaic County; W. L. Kinkead and Dr. Joseph R. Morrow, President of the League, Bergen County; Dr. Samuel B. English, Hunterdon; Dr. Alexander Macalister, Camden; Charles J. Merrell, Somerset; Miss J. Palmer Quinby, Monmouth County; Mrs. E. G. Shreve, Atlantic County; Dr. Charles I. Silk, Middlesex; Mrs. Luther G. Ogden, Cape May, and Eugene Sullivan, Essex. New members elected to the board were: Frederick D. Hopkins and Mrs. Harry Dubois, Bergen County; Miss Elizabeth Hynes, Monmouth; Dr. Harold S. Hatch, Morris County; Rev. J. Marshall Wilson, Warren County; John H. Adamson, Passaic County; Mrs. Isabelle Sommers, Paterson; Edgar B. Forse, Middlesex County; Dr. J. Lynn Mahaffey, Camden. At its business session the Board of Directors reelected the present officers: Joseph R. Morrow, M.D., President; Martin H. Collier, M.D., Vice-President; Mrs. E. G. Shreve, Secretary; W. L. Kinkead, Treasurer; Ernest D. Easton, Executive Secretary.

Dr. Emma A. Winslow, Research Director of the State Pension Survey Commission, discussed "County Welfare Work in Relation to Prevention of Tuberculosis", saying, in part:

Much progress has resulted in New Jersey from the development of tuberculosis work under the county plan of organization. The adequate administration of public relief is a matter closely related to tuberculosis prevention and control, and it is to be hoped that New Jersey will take a forward step in all counties this autumn in placing all relief of dependency on a county rather than a municipal basis. In order to make a county welfare plan of organization possible, however, a number of basic changes are necessary in the "poor law", and the adoption of such changes has been a matter of local decision in the various counties by action of the Legislature in requiring

a referendum vote on the "revision of the poor law" at the election to be held on November 3. More than \$2,000,000 will be spent from county funds in New Jersey during 1931 for the care of indigent tuberculous persons in sanatoriums and also nearly \$1,000,000 from state funds.

Ernest D. Easton, Executive Secretary of the New Jersey Tuberculosis League, recounting the progress of 25 years, said that, in the present emergency, it is fortunate that sanitary procedures are now well established and that increasing emphasis is placed on the care of children. It is also fortunate that the masses of the people have knowledge of the contagiousness of tuberculosis and know how to safeguard their families. We have hospitals, clinics, sanatoriums, nurses and other machinery available to an extent unknown 25 years ago. We should coöperate with these agencies for more effective work; and, at the same time, we should work with unemployment and relief committees so that people may have sustenance sufficient to maintain their resistance.

Joseph R. Moreland, Freeholder from Gloucester County, was unable to be present, on account of illness, and his report on the "Movement for Sanatorium Provision for Smaller Counties" was read by Mrs. Helen E. Schrock, Executive Secretary, Gloucester County Health Association. Mr. Moreland reported that a State Sanatorium, similar to Glen Gardner, had been suggested by Commissioner William J. Ellis, of the Department of Institutions and Agencies, for southern New Jersey counties, at a meeting of the Freeholders of the counties in question. This suggestion was strongly supported by Dr. Samuel B. English, Medical Superintendent, State Sanatorium, Glen Gardner. Mr. Moreland's paper was discussed by Dr. English and Miss Sydney Hall, Executive Nurse, Warren County Health Association, who told of a similar movement in northern Jersey counties.

Dr. Harold S. Hatch, Medical Superintendent of the Morris County Sanatorium, described innovations developed there, including improvement in the food service with a view to making meals more attractive and tempting to the patient.

Dr. Ira De A. Reid, speaking of the "Tuberculous Negro", pointed out that while the general death rate from tuberculosis has been declining, that for the colored population has sharply increased during the past 2 years; figures showing the Negro tuberculosis death rate in the state as 218 in 1928, 247 in 1929, and 264 in 1930, an increase of 46 points (or 21%) in 2 years. This is especially alarming when one considers that already in 1928 the Negro tuberculosis rate was 3 times as high as the rate for white people. Dr. Reid declared that this is not due nearly so much to racial inheritance as to poor economic conditions. This is especially true today, when the Negro is the first to be fired from a job and the last to be rehired. He said that this is a situation which is a challenge to the Tuberculosis Associations of the state, but which at the same time gives them an opportunity for unusual results. Negro health conditions being what they are, we are bound to produce great results for every little effort that is expended in their behalf.

Dr. Donald B. Armstrong, Third Vice-President of the Metropolitan Life Insurance Company, said: Many physicians rely on a child's weight—or lack of it—as an indication of tuberculosis. Underweight can no longer be considered a guide to possible tuberculosis, for in recent tests only a few of the active cases of the disease were found among under-weight children. In fact, more tuberculosis was found among over-weight chil-



dren than among the under-weights. Adequate x-ray and other facilities must be provided in schools, and communities generally, if the disease is to be brought under control. It also means education of the physician in the use of this equipment, as well as educating the public to demand its provision.

Dr. J. Bennett Morrison, Secretary of the Medical Society of New Jersey, described "The Role of the Physician in the Tuberculosis Fight". Physicians have been leaders in tuberculosis campaigns from their inception, and the family physician is the proper person to teach those afflicted with tuberculosis how to take care of themselves, and how to protect other members of the family and the public—through systematic destruction of his own infected sputum.

Dr. Morrison urged systematic examination of all school children, by school physicians where the examinations have not been made by the family doctor; the utilization of summer camps and preventoriums; the regular and repeated examination of employees of mercantile houses and manufacturing plants; and extension of the campaign for periodic health examinations of everybody.

### DR. R. D. FREEMAN LAUDED AT DINNER

(Reported by Dr. E. LeRoy Wood)

Dr. Richard Dean Freeman, retiring chief of staff of Orange Memorial Hospital, was honored recently when more than 50 members of the senior and junior hospital staffs gave him a dinner at Essex County Country Club. Dr. Freeman has reached the age limit, of 65 years, for active duty in the hospital wards, but has no intention of retiring from participation in hospital affairs or from active practice.

The staff members met at the club in the afternoon for a round of golf followed by the dinner, which was featured by speeches in praise of Dr. Freeman. Dr. Leonard H. Smith gave him, on behalf of the staff, a golf bag and set of matched clubs.

Dr. A. W. Bingham was toastmaster, the diners being seated at a large table decked in green, in tribute to Dr. Freeman's Dublin birthplace. A graduate of Trinity College, Dublin, he has lived in the Oranges 40 years and has been associated with the hospital 36 years. He served as chief of staff 5 years, succeeding the late Dr. Mefford Runyon.

One of the high lights of the evening was the singing by Dr. Freeman, of "Father O'Flynn" with piano accompaniment by Dr. John R. Shannon, of New York, his friend of many years, and formerly chief of staff of Manhattan Eye and Ear Hospital.

Dr. Henry C. Barkhorn, of Newark, President of the Essex County Medical Society, praised Dr. Freeman's spirit of coöperation and community service. Dr. Shannon gave reminiscences of their years of friendship and Dr. John Hammond Bradshaw and Dr. Thomas W. Harvey told of their association with Dr. Freeman and with the hospital.

Dr. Harvey, who is the oldest practicing physician in the Oranges and a former hospital chief of staff, said: "This business of age limits has its compensations. When I first retired as chief of staff I felt as though I had been laid away on a high and narrow shelf, but I find the shelf has a way of broadening with the years."

Dr. Freeman responded with a short speech of appreciation. Dr. S. A. Muta, of West Orange, was in charge of the dinner arrangements.

### WOULD ELEVATE CHIROPRACTIC

(The caption above, headed a report of the "first state-wide convention of the chiropractors of New Jersey" as published in the Atlantic City Press on October 12, 1931. Following a reference to some of the business matters considered in the convention, the Press carried what appears to be a condensed report of the *scientific* program, which we reproduce for the edification of physicians who may be interested in one or other of the 2 problems—"Development of Posture" and "Cure for Old Age".—Ed.)

#### Urges Development of Posture Practice Finds Cure for Old Age

(From Atlantic City Press. October 12, 1931.)

Dr. H. Lewis Trubenbach, of the New York School of Chiropractic, declared that the profession should be developed along the central idea of good posture. Complete pressure on the spinal cord would paralyze the patient, he pointed out. Poor posture throws the vital organ out of position and accounts for much illness, he declared.

Dr. Trubenbach declared that the Palmer school, the "mother" of the profession, has now only one-tenth of the students it had in 1922.

Dr. Frank M. Sindoni, of 1905 Pacific Avenue, a local chiropractor, told the convention that he had succeeded in finding the cause and cure of premature old age after months of research and tests on individuals.

"According to my experience," he declared, "I have concluded that premature old age is caused by the degeneration of the thyroid gland. By observing the activity of the thyroid gland, with the aid of an x-ray, I have discovered pressure on the first, fifth and sixth cervicals, and the fifth dorsal vertebrae caused indirectly, influence the thyroid gland. After three to six months of adjustment the flabby and drooping facial musculature and wrinkles in the face began to disappear!"

## Public Relations

### TOBACCO

(Editorial, written by Dr. R. M. Hewitt, in Minnesota Medicine, April 1931, p. 359.)

On the basis of one national principle—that if there is something people like to do there must be some reason why they should not do it—scientific investigators might be expected to have found some reason unqualifiedly to condemn the use of tobacco. On the basis of another national principle—that anything advertised with enough millions must be of virtue—it might be expected that these same investigators would have found that abstinence from tobacco is the hidden cause of lack of charm or of virility. But scientific investigators are free of fixed ideas, so long as they remain scientific.

The day may come when it will be a mark of individuality to amble a nonchalant mile for one of a coughless consignment of cigarettes, and then secretly to toast it over one's bootleg fire; but that day is not yet. Nor has the time come to educate the young mother that an infusion of tobacco must be mixed with the baby's food for the vitamins therein contained. Consequently, the perennial question of the harmfulness of "nicotin, pyrrilin

and other pyrogenous compounds carbon monoxide, traces of hydrocyanic acid, phenols and aldehydes" continues to bloom with the violets, and in between. And it should, for the problem needs solution.

The effects, not of nicotin only, but of the several chemical substances just mentioned, alone or together, must be considered when tobacco is smoked. Also, where it is grown, how it is cured, whether it is moist or dry, how fast it is smoked, how slowly, how it is wrapped, or what kind of a pipe is used, enter into the question. Moreover, the smoke may be inhaled or puffed, and tobacco may not be smoked at all. Tobacco may be, at least it used to be, chewed; whether or not circumstances would allow of expectoration. Doubtless all physicians can remember certain hirsute males who boasted that they ate theirs. As the biometrician might say, several variables seem to be involved.

Since these variables are not likely to be brought into correlation by the advertising writers and the physicians who help them with their copy, let us see what opinions a few of the serious seekers have evolved. In 1927, a small volume written by Schrumpf-Pierron was published under the auspices of the Committee to Study the Tobacco Problem. The bibliography contained 750 names, more or less. Schrumpf-Pierron's conclusions were, in part, as follows: The study of the action of tobacco on the organism is still incomplete, both scientifically and clinically; sound and unsound individuals react differently; immoderate doses cause disturbances that are first functional, then organic, and some of them are grave; disturbances have increased infrequency as the consumption of tobacco, particularly of cigarettes, has increased; the cigarette habit leads readily to abuse; further studies are needed, particularly "statistical research as to the influence of tobacco as ordinarily used among large groups of people as compared to the effect of abstinence among similar groups".

That does not give much of a chance for either the reformers or the copy writers to attack the subject from the health angle. The investigation, however, is being carried on.

W. E. Dixon, pharmacologist at Cambridge University, has studied the subject of the tobacco habit. He concluded his Norman Kerr Lecture with the statement that smoking "leads to digestive circulatory disturbances". He gave expression to an impression of clinicians that many years of continuous absorption of nicotin is responsible for some cardiovascular conditions of middle life and old age. However, he continued: "It may well be that living in a civilization such as ours, under the conditions of strain imposed by residence in cities, the ordinary man shows in his nervous responses variations from the normal, and on such persons tobacco exerts a beneficial function."

Rolleston has, in a sense, carried on the work of Schrumpf-Pierron by collecting from literature the views of 34 writers on the effects of tobacco. He did not come to conclusions. Who could?

It is not easy to see how a study could be prosecuted more scientifically than that of Diehl, of the University of Minnesota. He had a group of 445 smokers and one of 441 non-smokers. The work was analyzed by biometric methods. However, as Diehl pointed out, the subjects were too young to have suffered from degenerative changes, if tobacco is really responsible for any such changes. He found that the smokers had less stable cardiovascular systems than non-smokers, but he was careful to state that "the effect of such a difference on health or longevity never has been

determined". The final ratings of these groups, for classification of physical activities, were not significantly different.

Another relevant piece of work done in Minnesota is concerned with the old question of tobacco and thrombo-angiitis obliterans. Barker studied the consumption of tobacco by 350 patients between the ages of 25 and 55 years, who had thrombo-angiitis obliterans and who had been seen in the Mayo Clinic during the last 10 years. He compared with this group, another that corresponded with the first in every way except that the members of it did not give evidence of peripheral vascular disease. He found reason to believe that tobacco is not the primary cause of thrombo-angiitis obliterans, but that it may be a predisposing cause. Moreover, if patients with thrombo-angiitis obliterans have used tobacco excessively, the condition seems likely to run a more malignant course. Barker expressed the belief that evidence favors prohibition of the use of tobacco to patients with thrombo-angiitis obliterans, but, he added, "the data are by no means conclusive".

W. J. Mayo, who never has used tobacco, in discussing Baker's report, gave the present status of the tobacco problem as well as it can be stated: "I have no evidence to show that a moderate use of tobacco is harmful to the average person, but we know that even what might be called moderate smoking is harmful to some persons. On the whole, smoking seems a habit which has possibilities for harm, and has little to its credit, although many seem to derive a good deal of comfort from it, especially those persons who have nothing to do at the time which interests them more. Pipe smoking should be the least harmful, because the pipe is usually out, and the smoker is just as happy until he notices the fact, which depends largely on how much interested he is in what he is doing. The pipe seems to be the adult pacifier which takes the smoker back to his childhood days. Some smokers, especially of strong cigars, have functional heart trouble and it now appears that the cigarette smoker is subject to various ills. I doubt that much harm results to the person who smokes a cigarette only occasionally."

From all that has been done thus far, it seems that "T. M." means both "tis mince" and "tain't mince". The Governor of North Carolina and the Governor of South Carolina each must have been an excellent judge of good liquor. One said there was iron in the whisky; the other said, leather. When the barrel had been drained, they found in the bottom a loose tack, just under the head of which was a leather gasket. Yet it is not recorded that either governor died of hepatic cirrhosis. Nor is the opposite on record, for the story is fictitious.

We need the facts about cirrhosis. We also need them about the effect of tobacco. All encouragement to those who are seeking them, and caution to those who are inclined to jump to conclusions.

#### AGREE NOT TO PUBLISH DOUBTFUL ADVERTISING

(The Editor of this Journal has on several occasions, but particularly in his last Annual Report, urged an active campaign against fraudulent advertising, and reprints this news item as an indication that now is a favorable time to develop such a campaign. Our readers may be interested in learning that his cigarette editorials were not fruitless; the Federal Trade Commission has had some of the tobacco companies "on the spot"; about which, more anon.)



### Magazines and Papers Will Abide by Trade Board's Action on Misleading Copy.

(From the New York Times, Sept. 13, 1931.)

The Federal Trade Commission announced today, in connection with its campaign against fraudulent advertising, that several publishers and advertising agents have signed stipulations to abide by the commission's action on charges preferred against certain advertisers. In each instance the agent or publisher waived his rights to appear in proceedings as correspondent with the advertiser. The commission did not name the individuals or firms concerned. One New York agency had placed for publication the advertising copy of a corporation selling an alleged remedy for indigestion.

The publisher of several widely circulated magazines which had printed advertisements of 3 concerns selling watches and jewelry of questionable value, as well as perfumes and an alleged cure for the tobacco habit, agreed to stop publishing such copy, awaiting disposition of the commission's cases against the advertisers.

The publisher of a motion picture magazine agreed to stop publishing advertisements of a cure for bashfulness.

A large Southern newspaper, which had carried advertisements of an alleged physician offering a competent treatment for high blood pressure, agreed to stop publishing them pending action against the advertiser.

The publisher of 2 magazines, printing advertisements of a cream to develop various parts of the body, agreed to abide by the commission's action against the advertiser.

The commission said that facts in the proceedings were presented to show methods of competition condemned as unfair, to guide industry, and to protect the public.

### VACCINATION FAVORED TO PREVENT DIPHTHERIA

League Commission Reports to International Hygiene Congress in Paris

(From N. Y. Times, Oct. 20, 1931.)

The commission of experts appointed by the hygiene committee of the League of Nations to study the question of antidiphtheria vaccination, which first met in London in June, 1931, has presented its findings at the International Hygiene Congress, being held at Pasteur Institute. The report is based on comparative studies and diphtheria vaccinations following a program planned at a meeting in Paris in July, 1929, and a study of various documents during the last few years.

The commission approves vaccination against diphtheria and finds it reduces mortality and acts as a preventive. The reaction sometimes resulting from vaccination is found to be harmless and should not interfere with propaganda in favor of vaccination of all children.

The use of a mixture of toxin-antitoxin and anatoxine is recommended. The establishment of a universal basis for standardization and control of all prophylactic vaccines against diphtheria is suggested.

The vaccine should be administered in 3 doses, 3 weeks to elapse between the first and second doses and 2 weeks between the second and third. Children should be vaccinated before they are of school age or the first year they attend school.

Charitable institutions, vacation colonies, preventoriums and sanatoriums should demand certificates of vaccination against diphtheria from children and from their personnel. Nurses and the personnel of hospitals, schools and asylums should be vaccinated. Vaccination should be the object of active propaganda by the hygiene administrations of all countries.

Members of the commission were Dr. Thorwald Madsen, President of the Hygienic Commission of the League of Nations; Dr. George W. MacCoy, of the United States. Professor H. H. Dale, of London, and Professors A. Calmette and W. Colle, of France.

### SMITH URGES CLINICS OR HEALTH INSURANCE

Ex-Governor Says Some System is Needed to Make Treatment Available to All

(From N. Y. Times, Oct. 17, 1931.)

Some form of health insurance, or a widely established system of public health clinics, whereby health information and proper medical treatment would be made available for every man, woman and child, was advocated by former Governor Alfred E. Smith, at a conference on industrial medicine and traumatic surgery, which occupied the closing sessions of the twenty-first annual clinical congress of the American College of Surgeons at the Waldorf-Astoria.

Mr. Smith was one of several prominent laymen, representatives of industry and labor, to join the surgeons in their campaign to give the best medical treatment to the vast and growing number of accident victims, in industry and otherwise. Taking as their slogan "safety afterward", the speakers emphasized the need of not only restoring the accident victim to health but to follow up his case after recovery and to make sure that his usefulness to society is also restored to as high a degree as science would permit.

### HEALTH PURCHASABLE, SAYS SMITH

"One of the first lessons I learned", said Mr. Smith, "was that public health was purchasable and that its administrative application to government, be it state or local, has wide significance.

I have seen the devastating effect of illness on a worker's family. We still compensate inadequately because we have not yet succeeded in compensating for all diseases incurred in the course of occupation, which are directly traceable to the occupation or industry itself. Until the law applies generally there will continue to be cases such as those of the workers suffering from radium poisoning, which occurred in New Jersey a few years ago.

*I would like to see some system whereby health information and proper medical treatment would be available to every man, woman and child, regardless of his position in the world, whether this is to be done through some form of health insurance or through a widely established system of public health clinics.* (Italicized by the Editor.)

The lesson in the preservation of human life has been best illustrated in Cattaraugus County, where an experiment was established, utilizing every conceivable health resource in that county—both public and private. It was so coordinated, and made to function, that every child felt its influence before it was born, and every adult until the last of his days.

We found at the time of the war, when we made

careful health examinations, that 33% of the young men suffered a physical defect which could have been cured had they received attention during the early years of their lives. How much of this has since been corrected is hard to say. Only by constant effort and the constant dissemination of knowledge can we hope to progress along these lines.

Your organization must lead the way by giving us the scientific facts with which we can deal. But the state, using that word in its largest sense, must fit those facts into effective administrative action."

### DOCTORS' DILEMA

(Editorial in New York Times, Oct. 20, 1931.)

President Angell, addressing the Congress of the American College of Surgeons, passed in review many things that are wrong, or alleged to be wrong, with the medical profession, but expressed particular impatience with the "narrow-minded" opposition to socialized medicine. Every form of health activity developed through group or community action is resisted by a few practitioners as an attempt to deprive them of a living. Their attitude, said Dr. Angell, is like the hostility of labor organizations to labor-saving machinery.

This blunt assertion—that physicians who set themselves up against the health activities of the community are as foolishly engaged as the Luddite machine-smashers of the early nineteenth century—might be rounded out with a more cheerful message. It has been demonstrated that labor's resistance to technologic inventions is, in the long run, against labor's own interests. The industrial revolution has enormously lifted the living standard of the working classes. In the same way it might be pointed out to the doctors that increasing Government activity in the field of public health may redound in the long run to the material advantage of the private physician and surgeon.

In the matter of health, there are no limits to human wants. The more of health we have, the more we want. In concrete form this truth is stated by Michael M. Davis, of the Julius Rosenwald Foundation, in his new book, "Paving Your Sickness Bills", published by the University of Chicago Press. He finds from a study made by the United States Bureau of Labor Statistics in 1918-1919 that the amount spent on illness averages \$60 a year per family. But the actual expenditure ranged from \$34 a year in the lowest-income classes to \$95 a year in the highest-income families. The free services which the poor receive affect their private expenditure. But in the main a higher income brings more attention to the lesser ailments, indispositions, hurts, maladjustments and disfigurements which the poor accept as part of their "lot".

To the extent, then, that socialized medicine—the preventive work in the public schools and the work of public departments of health—contributes to the building up of a healthier population with higher earning power it contributes to developing a public for the ministrations of the medical profession in the long run. A healthy child growing up into an intelligent and sturdy adult worker means a citizen who, when occasion requires, will consult his family doctor. That same child growing up into a stunted, low-waged adulthood means a client for the free clinic and hospital.

### LEADERSHIP IN MEDICINE

(Editorial from the Washington Post, Oct. 14, 1931)

Medical men are thinking seriously of means to make their services more available to the public. Two addresses delivered at the annual clinical congress of the American College of Surgeons, in New York, give hope that the profession may take leadership in a movement to put the practice of medicine on a more business-like basis.

Dr. C. Jeff Miller, retiring President of the College of Surgeons, pointed out the dangers of state control over medicine and the impracticability of health insurance. "Public and municipal hospitals are filled with medico-political appointees whose ability is frequently negligible and whose ethics are frequently doubtful", he said. "One has only to look at the corruption of state and municipal governments all over the country today to question very seriously the claims which are made for further state control over anything."

Dr. Miller's remarks leave no doubt that the profession is apprehensive lest a dissatisfied public demand state control over the practice of medicine. Under the present arrangement the wealthy obtain ample medical care and charity cases are not neglected, but vast numbers in moderate circumstances do not have the guidance and treatment of competent medical men. As a result, quacks still flourish and millions of dollars are spent on worthless remedies. The need for better organization of the medical profession to serve the whole public at reasonable costs becomes more acute every year.

One means by which the profession may extend its services was suggested by Dr. Allen B. Kanavel, President-Elect of the College of Surgeons. *"The public demands medical services at reasonable prices. The public does not want inadequate or unscientific service. But unless the medical profession takes leadership in the movements to make preventive and curative medicine more available, those movements are liable to fall into the hands of inferior practitioners."* Dr. Kanavel urged medical men "not to let the initiative slip from their hands".

*If the profession takes upon itself the responsibility of organizing for better service, there is little danger that the states will extend their control over the practice of medicine.* (Italicized by the Journal Editor.)

### HOLD FREE FOOT CLINIC IN RESORT THIS WEEK

(This clipping from a recent issue of the Atlantic City Press, raises several interesting questions, but is used here for the purpose, primarily, of amusement and an object lesson in the facility with which would-be doctors coin high-sounding titles. Would you have known, previously, what constituted a *practipedist*? Ed.)

Dr. Lewis L. Walter, osteopathic physician, assisted by William C. Curtis, *practipedist*, will conduct a free foot clinic today, tomorrow and Wednesday at Dr. Scholl's Foot Comfort Service establishment, 1724 Pacific Avenue.

Dr. Walter will hold an examination clinic, consulting with foot sufferers and advising them with regard to their individual difficulties. . . . the object of the free clinic being to promote foot health and comfort. William C. Curtis, who will assist Dr. Walter, is a member of Dr. Scholl's personal staff.



## School Health Department

### PHYSICIAN'S PART IN HYGIENE AND SANITATION OF THE SCHOOL BUILDING

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Education, Trenton, N. J.

(1) Recommendation of a code of standards in classroom hygiene for the teacher.

The school administrator and the school physician should together devise a code of instructions to the class room teacher, covering, for example:

- (a) Location and use of the thermometer.
- (b) Temperature range.
- (c) Methods of ventilation and avoidance of drafts.
- (d) Value and ways of using sunshine.
- (e) Proper adjustment of window shades.
- (f) Cleaning of erasers.
- (g) Placing of plants to avoid the obstruction of light.

(2) Recommendation of a code of standards in building hygiene and sanitation for janitors and helpers.

In a program of activities and instructions, the school physician should attempt to state simply and briefly the principles underlying the hygienic and sanitary upkeep of the school plant, dealing with such topics as the following:

- (a) Disinfectants and deodorants, their value and uses.
- (b) Sweeping, dusting, and mopping as health measures.
- (c) Heating, ventilation, humidity.
- (d) Cleanliness of toilet rooms and lavatories.
- (e) Cleanliness of windows as a sight-saving measure.

(3) Recommendation for purchase of equipment and supplies to further the health program. This should include for example:

- (a) An eraser cleaning machine.
- (b) A foot-candle meter for measuring light.
- (c) Suitable disinfectants and deodorants.

(4) Recommendation of a code of standards in cafeteria and kitchen hygiene and sanitation.

This furnishes an example of the coordination that should exist between departments, in this case, between the physician (or the nurse) and the home economics supervisor. It is, however, the schools where the home economics supervisor does not control the school lunch, or where no such supervisor is employed, that the advice and direction of the health staff are needed. The code, in part, should include:

- (a) Food preservation.
- (b) Safe methods of food handling.
- (c) Methods of disinfection and sterilization.
- (d) Garbage and sewage disposal.

The code should further include instructions on the following topics, among others:

- (a) Modes of disease transmission.
- (b) Causes and signs of food contamination.
- (c) Cleanliness and costumes of food handlers.
- (d) The extermination of flies, insects, mice and rats.

(5) A periodic inspection by the physician of all parts of the school plant.

The inspection carries weight when definite instructions have been issued. It should be made

while the plant is in use and it should include observation of the staff at work. A report is made to the building executive and to the administrative officer of the system. It should state the findings, together with suggestions for such corrections as may be necessary. A regular form used for reporting purposes systematizes the procedure.

In general, the items included in the inspection are as follows:

- (a) General cleanliness.
- (b) Cleanliness of cafeteria and kitchen, including refrigerators and storage closets.
- (c) Condition of toilets, lavatories, urinals, wash basins.
- (d) Presence of soap and towels.
- (e) Cleanliness of windows.
- (f) Condition of blackboards.
- (g) Condition of locker and shower rooms.

## Communications

### AMERICAN COLLEGE OF PHYSICIANS

The Sixteenth Annual Clinical Session of the American College of Physicians will be held in San Francisco, California, April 4-8, 1932. Headquarters will be the Palace Hotel, where general scientific sessions, registration, and exhibits will be held. Clinics will be conducted in various hospitals and institutions in San Francisco and near-by communities.

Dr. S. Marx White, Minneapolis, President of the College, has in charge the selection of speakers and subjects on the general program, while Dr. William J. Kerr, San Francisco, Professor of Medicine at the University of California Medical School, is the General Chairman of the Session, and responsible for all local arrangements, in addition to the arrangement of programs and demonstrations. Following the San Francisco meeting a post-convention tour will be conducted through Yosemite Valley, Southern California (with 2 days in Los Angeles) and the Grand Canyon of Arizona.

## Woman's Auxiliary

### ADULTERATION OF FOODS

On several occasions, the Editor of this Journal has suggested that the Auxiliary might consider the advisability of conducting a campaign against quackery, and in active opposition to false and misleading advertising of all sorts. In line with that suggestion we may recommend a campaign against adulteration of food products, which is related to matters that belong even more intimately than drugs to the sphere of action for women. That food adulteration is practiced almost universally, to some extent, we are quite sure, and we can think of no task of greater importance, for safeguarding the public health, than efforts to improve existing conditions. It is, too, a task that might profitably be taken up by any of our County Society Auxiliaries. While on vacation this summer, we chanced to see the Annual Report of the Ministry of Health, of Great Britain, and the London Times published in detail that portion of the Report which referred to the question of pure foods. It so well describes conditions found upon investigation in England—and which undoubtedly exist here—that we deem it worthy of republication in such form as to be informative to members of the

Auxiliary, and to render them better able to decide whether such a campaign should be started in this state, or in any of the counties.

#### NUTRITION

Under this heading, the Chief Health Officer, Sir George Newman, presents an interesting discussion which may advisedly precede the report of adulterations. So, we reprint the following from the London Times of September 4:

"The subject of nutrition is discussed in a section which deals with the relation of food to health and disease. He states that healthy and complete nutrition is something infinitely wider than mere feeding or filling of the stomach, mere stoking of the engine. Speaking generally, the malnutrition of the school child in this country has declined in a single generation from approximately 10% to nearer 1%, and this remarkable change has been due to the medical care of the child, to the supplementary feeding at school, and to far-reaching social improvement and higher wage in the home. Somewhat comparable amelioration has been taking place among the adult population. The Army canteens during the War, the industrial canteens in factories, the improved dietaries in hospitals, sanatoriums, and Poor Law institutions, the enormous development of the catering trade, and the manufacture of prepared foods, the ever widening public medical services, an increased wage—all these, have contributed substantially to the improved nutrition of the people in recent years. Their whole dietary has undergone reform—food, fruit, fish, meat, and dairy products are brought from far distant sources, transported under new methods of refrigeration, canning and packing; and betterment in quality has accompanied increase in quantity.

Yet, notwithstanding these advances, the nutrition of the people leaves much to be desired. There is still much apathy and ignorance in the choice of foods, often associated with deplorable inaptitude in cookery. Our scientific knowledge stands far ahead of our practice; and our extraordinary range of food markets, oversea and at home, combined with expeditious transport, have brought to our tables the practicability of securing a dietary beyond the dreams of our forefathers, attractive and nutritious, but we do not use it sufficiently or wisely. We continue many old bad habits in regard to meals, which we permit to become monotonous and stale, badly cooked, unappetizing, untidily served. Many hungry consumers bolt their food, or wash it down with tea or beer, forgetting that such a custom is unfair to the food, the tea, the beer, and the body. Some persons, no doubt, are under-fed, but many are over-fed—giving their poor bodies little rest, clogging them with yet more food, and disregarding the imperative necessity to health and appetite of a thoroughly cleansed alimentary tract. It is not too much to say that our national capacity for work and output is impaired by unsatisfactory nutrition; it is not exaggeration to say that some of our commonest diseases are directly due to deficiency, or excess, of certain food constituents.

There is a widening sphere for research and investigation into the relations between nutrition and capacity to work, between the defects of nutrition and disease, between the resistant power of nutrition and preventive medicine. Has the time come when it is possible to secure wise and authoritative counsel and direction as to lines of research which seem most likely to yield constructive findings? England has become by the

work of its pioneers in physiology, from the days of Harvey in the seventeenth century to our own times, the home of physiologic science, the science of normal life at its best. In particular, here were discovered the accessory substances (vitamins) of food. What is the most sensible way of practically applying modern physiologic advance in our knowledge of nutrition to the needs of the time? This is the problem which faces every public health authority in the country and is one which should be receiving the careful consideration of every medical officer of health. With a view to the fuller exposition and consideration of these matters the ministry has recently appointed a committee to advise on the practical application of modern advances in the knowledge of nutrition. The functions which it is contemplated that this committee will perform will include the tendering of advice to the Ministry of Health on physiologic aspects of nutrition and its relation to food, with special reference to dietaries for use in public institutions and to the issue of information directed to improving the nutrition of the people.

Among other things, during 1930, 136,515 samples of food and drugs were analyzed. This is the highest number recorded, and represents an increase of 2931 on last year. The number of samples reported as adulterated or not up to standard was 6496, being 4.8% of the whole, as compared with 5.8% in 1928 and 5.4% in 1929. The Public Health (Preservatives, etc., in Food) Regulations were reported to have been contravened in 519 instances, which is about the same number as in 1929. One sample of an article sold as a preservative powder consisted entirely of ground rice starch.

Other samples were found to contain prohibited preservatives or more than the permitted amount of sulphur dioxide. Most of the samples of coffee reported against were adulterated with chicory; arrowroot was found in a sample of cocoa and added alkali in 3 other samples; 5 samples of tea contained iron filings and 4 others extraneous mineral matter. Mention was made in last year's report of alcohol being found in "non-alcoholic" wine, and 2 samples taken in 1930 contained respectively 14.4 and 14.3% of alcohol. An excess of sand or of mineral matter was found in certain milled or ground foods above what could be considered to be unavoidable or to be necessary for their production or preparation as articles of commerce.

Thirty-five out of 179 samples of "bread-and-butter" sold in coffee houses and restaurants, were found to be made with margarine or a mixture of butter and margarine.

#### ARSENIC IN SWEETS

The occurrence of several cases of illness due to the consumption of sweets contaminated with arsenic appears to have led in a number of districts to an increased number of samples being taken of sweets and confectionery. Arsenic was found in 18 of the samples reported against by analysts. Of the other samples found unsatisfactory, 38 contained an excess of sulphur dioxide and a few contained talc. An article described as "Rum and Butter Toffee" contained no butter, and the "rum" was supplied by synthetic flavoring. Other "butter" sweets were also reported as unsatisfactory on the ground that if butter was present it was in a very small quantity, the little fat present being generally fat other than butter. Copper was found in 2 samples of peas, in one of cider, and in the "gold tips" of 2 samples of sweetmeat cigarettes. Lead was found in 5 samples of



cider, 1 of cake, 1 of beer, and 1 of lemonade. Fifty-three samples of tinned foodstuffs, including fruit, vegetables, fish, soup, and black treacle, contained tin: 2 samples, 1 of corned beef and 1 of a sauce, contained zinc.

Thirty out of 1593 samples of cheese were reported against. Considerable interest was aroused by the reference in last year's report to cheese contaminated with tin from the tin foil in which it had been wrapped, and it is understood that manufacturers and others concerned are making efforts to reduce the extent of such contamination to the lowest possible limit. Nineteen samples were reported as unsatisfactory last year because of contamination with tin in varying amounts up to 8.33 grains per pound; 1 (an informal sample) is stated by the analyst to have contained 220 parts per 1,000,000 (*i.e.*, approximately one and a half grains per pound) of tin and also 44 parts per 1,000,000 of antimony. This sample was of a "full cream" cheese said to have been made in France. Deficiency in fat was the ground of the adverse reports upon the other samples."

#### Meeting of the Executive Board of the Woman's Auxiliary to the Medical Society of New Jersey

The fall meeting of the Executive Board of the Woman's Auxiliary to the Medical Society of New Jersey, was held at the Newark Athletic Club, Newark, on Monday, October 16; the President, Mrs. H. Roy Van Ness, presiding, with 17 members present. The minutes of the previous meeting were read and approved.

The Treasurer, Mrs. Edward Clarke, gave her report.

A letter was read from Mrs. Walter Jackson Freeman, President-Elect of the American Medical Association Auxiliary, thanking the New Jersey Auxiliary for invaluable help at the Convention in Philadelphia last June.

A note was received from Mrs. James Hunter, thanking us for our messages of sympathy in her sorrow.

The President appointed Mrs. Neer, of Paterson, as Chairman of the Program Committee, to fill a vacancy by resignation.

It was moved, seconded, and carried to limit the number of names of the Advisory Board (on the stationery) to 5 and when that number is reached, 1 name is to go off, automatically, each year.

It was moved, seconded and carried, that the October and April meetings of the Executive Board be limited to members of the Board, but that the January meeting be open to all members of the Auxiliary from all of the counties.

The January meeting will be in Trenton, January 11, 1932, the hour and meeting-place to be announced later, and every member of the Auxiliary is cordially invited to attend.

The President asks that each county work for a 100%-paid-up membership, for more subscriptions to Hygeia, and for the Widow's and Orphan's Relief Fund; these all being stressed by the A. M. A.

Mrs. Van Ness also suggests that each county auxiliary shall have a Telephone Committee, so that any piece of important news may be broadcast, at a moment's notice, to the entire membership.

County Auxiliary Presidents are also asked to note that it is quite necessary that all annual meetings and the beginnings of fiscal years, shall be uniform throughout the state; annual meetings to be in May and officers to take office in October.

Every physician who receives the Journal of the

A. M. A. also receives the monthly Bulletin, which carries the National Auxiliary news.

If we cannot train our husbands to bring the Bulletin home, we might subscribe for it ourselves, since it will be sent to any address for 50c a year.

Widows of New Jersey physicians may have the State Society Journal *free*, if they will apply to Dr. Henry C. Barkhorn, 45 Johnson Avenue, Newark, New Jersey.

A delicious luncheon was served, the arrangements having been made by Mrs. George A. Rogers.

There being no further business, the meeting adjourned.

#### Burlington County

The regular meeting of the Auxiliary to the Burlington County Medical Society was held at Burlington County Hospital September 30, at 1.30 p. m.

Members of the Medical Society have asked the Auxiliary to coöperate in securing for them speaking engagements throughout the county; to various organizations such as P. T. A. and Kiwanis, on health topics. We decided to send out form letters to the Presidents of the P. T. A's in the county and arrange other lectures by personal contacts. We have to date secured about 10 engagements.

The President, Mrs. Hartman, asked the present officers to remain in office with her, and the Committee Chairmen to do the same. Mrs. Milton Schisler, of Florence, was appointed Chairman of the Press and Publicity Committee.

A discussion followed, concerning the location and frequency of holding meetings, and it was decided to hold a meeting in each group district; also to precede or follow the regular business meeting with some social affair such as a luncheon. The next meeting is to be held some time in October at the Riverton Country Club.

#### Essex County

Reported by Mrs. F. J. McCauley

The Woman's Auxiliary to the Essex County Medical Society held its first Executive Board meeting of the season on Friday, October 16, at our new headquarters in the Academy of Medicine Building in Newark, where rooms have been renovated and made accessible for us at all times.

The Annual Meeting will be held on Monday, October 26. This meeting will be a luncheon at the Newark Athletic Club, in Newark. All members and all the women in Essex County who are eligible for membership in the auxiliary have been invited to attend. Mrs. Earl Snively, of Newark, is chairman, assisted by a large and able committee.

#### Gloucester County

Reported by Mrs. Henry B. Diverty

The Woman's Auxiliary to the Gloucester County Medical Society held a meeting at Hotel Pitman, October 15, at 9 p. m., the same hotel and time of the doctors' meeting.

An electric storm at the time interfered with attendance, yet a goodly number was present. Election of officers took place, with results as follows: President, Mrs. Elwood Downs; Vice-

President, Mrs. Charles Fisler; Secretary, Mrs. Chester I. Ulmer; Treasurer, Mrs. David R. Brewer. Mrs. Miller was with us as guest, accompanying Dr. Miller, of Millville.

Mrs. Fuller Sherman was present and her name was added to our membership roll. After the meeting adjourned, the ladies enjoyed a game of bridge until announcement from the doctors of their adjournment, and an invitation to the dining room, where a fine collation was served by the proprietor of the Hotel Pitman.

### Hudson County

Reported by Mrs. James Murphy

The regular meeting of the Woman's Auxiliary to the Hudson County Medical Society was held October 23. Mrs. Nevin handed the gavel to Mrs. George Culver, who became the third President of the organization. As Mrs. Emmet Connell will be unable to serve as Recording Secretary, Mrs. James Murphy was appointed to the office. The Secretary's minutes were approved. The Treasurer's report, showing a balance of \$143.99 in the checking account, and \$625.64 in the savings account was accepted.

It was moved by Mrs. Dodson, seconded by Mrs. Nicholson; that the date of the meetings be changed to the first Monday of each month, in place of the fourth Friday; motion carried. The next meeting will be held Monday, November 2.

It was moved by Mrs. Largay, seconded by Mrs. Duckett, that the usual Card Party will be held, the date to be decided upon later.

Mrs. George Culver reported on the State Executive Board meeting, held in Newark, where the State President, Mrs. Van Ness, stressed the following: 100% paid-up membership; Distribution of Hygeia; Health Education; Public Relations; Widows' and Orphans' Relief Fund. Under the provisions of this fund doctors are assessed \$1 at the death of each doctor member, and from this \$500 is given to the widow; money is also loaned to doctors when necessary and no interest is charged. It was decided to invite Mrs. Van Ness to the next meeting to further explain the above mentioned topics.

The following appointments were made by the president:

Chairman of Entertainment Committee, Miss Hetherington; Chairman of Widows' Fund Committee, Mrs. John Nevin; Chairman of Hygeia Committee, Mrs. Jaffin; Chairman of Membership Committee, Mrs. McDede; Chairman of Publicity Committee, Mrs. Murphy.

Mrs. Freile spoke on the need of the Visiting Nurse Service. It was moved by Mrs. Nicholson, seconded by Mrs. Largay, that a box be placed on the table, into which contributions might be placed to meet emergencies that may arise. Motion carried.

Mrs. Louis Pyle was welcomed as a member. Every member was asked to bring a new member for the next meeting.

It was moved by Mrs. Ruvane, seconded by Mrs. Nevin, to adjourn. Tea was then enjoyed.

### Ocean County

Reported by Mrs. Eugene Herbener, Secretary

The Woman's Auxiliary to the Medical Society of Ocean County held the fall meeting at the residence of Mrs. Frank Denniston, at Point Pleasant, on October 16, at 3.00 p. m. The fol-

lowing members were present: Mrs. V. M. Disbrow, Mrs. E. G. Herbener, Mrs. Frank Brower and guest, Mrs. Alfred Woodhouse, Mrs. F. N. Bunnell.

The meeting was called to order by the President, Mrs. Frank Denniston, and the regular order of business was carried out. It was agreed to give a card party sometime the early part of November, to be held at the American Legion House, at Toms River, the definite date of which is to be announced later.

The proceeds of this party go toward purchase of the magazine Hygeia, to be placed in all of the public schools and libraries of Ocean County.

A vote of thanks for the pleasant afternoon and refreshments was extended to Mrs. Denniston.

### Somerset County

Reported by Mrs. Abram Levy

The Woman's Auxiliary to the Somerset County Medical Society held the first meeting of the season at the Hotel Deauville, in Somerville, with a record attendance, which seems to augur a successful year.

A report of the June Convention of the State Society was read.

The Nominating Committee presented the following list of candidates: President, Mrs. Josiah Meigh, Bernardsville, Vice-President, Mrs. A. L. Stillwell, Somerville; Cor. Secretary, Mrs. Dan Renner, Skillman; Recording Secretary, Mrs. Lancelot Ely, Somerville; Treasurer, Mrs. Edgar Flint, Raritan; Reporter, Mrs. A. Levy, Somerville.

After the reading of the Treasurer's report, question was raised as to the wisest disposition of the accumulated funds. It was decided as follows:

(1) To renew all Hygeia subscriptions carried in the schools and libraries of the county.

(2) To contribute to the milk fund in the schools of the county.

(3) And, most important, to provide private nursing for children, in the ward of the Somerset County Hospital, who may be in need of special care, urgency of the cases being left to discretion of the Superintendent of the hospital.

After the meeting was adjourned, the men and women met in the dining room of the hotel for the annual dinner. There were several speakers, most noteworthy being State Senator Dryden S. Kuser, and the Director of the Board of Freeholders of Somerset County.

The President of the Somerset County Medical Society complimented the Auxiliary on its decision to use most of the funds to provide special nursing for children in the wards.

Our Auxiliary has made this decision its chief aim, and we feel that it may be an aim worthy of consideration by the auxiliaries of the state.

### Union County

Reported by Mrs. Russell A. Shirrefs

The Woman's Auxiliary to the Union County Medical Society, held its October meeting on the twenty-eighth in the Nurses' Home of the Elizabeth General Hospital. The rain and fog which is the usual accompaniment to our meeting set in early. However, the dreariness of the weather was dispelled by the gaiety of Halloween decorations. Mrs. Hubbard, our President, opened the regular meeting, during which the usual business was transacted, and it was decided that the in-



coming President be authorized to appoint a committee to so alter the constitution that it might conform more nearly to the constitution of the State Society Auxiliary.

Adjournment of that meeting, and calling to order of the Annual Meeting, followed. Annual reports were read by officers and chairmen of committees. The treasurer showed a healthy balance, in spite of financial handicaps during the past year.

The "slate" presented by Mrs. F. A. Kinch, was received and the secretary was ordered to cast the ballot for the following members who were then declared elected to the several offices: Mrs. H. D. Corbusier, of Plainfield, President; Mrs. H. H. Bowles, of Summit, for President-elect; Mrs. Russell A. Shirreff, of Elizabeth, for First Vice-President; Mrs. R. M. Miller, of Summit, for Second Vice-President; Mrs. C. A. Hoffman, of Plainfield, for Secretary; Mrs. G. S. Laird, of Westfield, for Treasurer; Mrs. D. R. McElhinney, of Elizabeth, for Trustee.

Three guests were present: Dr. John F. Hagerty, of Newark, President of the State Medical Society, and Mrs. Hagerty, and the State Auxiliary President, Mrs. R. H. Van-Ness.

Dr. Hagerty spoke of the paradox of a physician's life, being called upon to destroy the very thing by which he earns his livelihood. He quoted the well-known, but poorly appreciated, martyrdoms of physicians and scientists, for love of humanity, and deplored the slowness of the public and the government to recognize meritorious service. Dr. Hagerty was warmly applauded.

Mrs. Hubbard introduced Mrs. Van Ness, who gave a vigorous talk, with many practical and important suggestions for the improvement and progress of our organization. These were carefully noted by the secretary and incorporated in the minutes. Mrs. Van Ness placed great emphasis on the importance of belonging to the Society for the Relief of Widows and Orphans of Physicians.

Mrs. Van Ness and Mrs. Hagerty were presented with corsage of bouquets.

Mrs. Hubbard, in well-chosen words, turned the responsibility of her office over to our new President. Mrs. Corbusier, in accepting office, recalled to us the occasion when Mrs. Hubbard defied the letter P and made it represent all virtues: prudence, patience, patriotism. As our new choice, Mrs. Corbusier, proceeding alphabetically, and following the precedent established by her predecessor, adopted for her administration, and for her very own, the letter Q. Now, Q, when investigated, showed an alarming tendency toward the words quarrelsome, queer, querulous, but showed marked improvement in quick, quiet and quit. Finally, as cue and pass-word for her administration, Mrs. Corbusier pronounced the words—Quick and Quit.

This being accepted in the nature of a hint to the secretary pro-tem, she hereby quickly quits—only to add hastily a list of chairmen appointed by our new President, and may she always be inspired by the wit and charm for which she is known.

Committee and their Chairmen: Organization and Membership, Mrs. N. W. Currie and Mrs. W. J. Hallock; Legislation, Mrs. P. duB. Bunting; Education, Mrs. F. A. Kinch; Program, Mrs. L. Orton; Ways and Means, Mrs. D. R. McElhinney; Public Health and Hygeia, Mrs. H. V. Hubbard; Publicity, Mrs. C. A. Hoffman; Hospitality, for Elizabeth, Mrs. Bunting; for Summit, Mrs. Bowles; and for Plainfield, Miss Louis.

## County Society Reports

### ATLANTIC COUNTY

John S. Irvin, M.D., Reporter

The first meeting of the Atlantic County Medical Society for this term was held in the Blue Room of the Chalfonte Hotel, the meeting being called to order by the President, Dr. Norman J. Quinn, at 8.30 p. m. Minutes of the May meeting were read by Dr. Irvin, in the absence of the secretary, Dr. Marcus, and were accepted as read.

Attending the meeting were 36 members and 50 nurses from Atlantic City Hospital.

**Board of Censors:** The name of Dr. Stanley L. Lucas having been passed upon by the Board was presented to the Society for approval, and Dr. Lucas was duly elected to membership.

Dr. Quinn spoke of the "Outing" that was to have been held in June, but which was, in the hope of securing larger attendance, changed to September 22, at the Ocean City Country Club; and the result was satisfactory.

Applications of Drs. Carl Gordon and Wm. J. Doherty, of Pleasantville, were received and referred to the Board of Censors.

A letter of appreciation was read from the Atlantic County Visiting Nurses' Association, thanking the Society for coöperation in the Atlantic City Show.

Cards of appreciation were read from the families of Dr. Deaver and Dr. Taggart.

The following communication was read from the Kiwanis Club, of Atlantic City:

*Whereas*, Dr. Clyde M. Fish, Chairman of the Under-Privileged Children Committee, of the Atlantic City Kiwanis Club, has, during the 1931 season, done work in connection with the Atlantic City Kiwanis Junior Base Ball League, which has been of incalculable value in development of the physical and mental welfare of the youth of Atlantic City; and

*Whereas*, Said Dr. Clyde M. Fish has done the same at a great personal sacrifice; and

*Whereas*, Said work is but another evidence of his great humanitarian interest:

*Now, Therefore, Be It Resolved*, That Atlantic City Kiwanis Club does hereby express its appreciation to the said Dr. Clyde M. Fish for the service so rendered to the Club and to the youth of Atlantic City; and

*Be It Further Resolved*, That a copy of this resolution, duly attested by the President and Secretary of the Club, be presented to the said Dr. Clyde M. Fish and spread upon the minutes of the Club; and

*Be It Further Resolved*, That a copy of said resolution be forwarded to the Atlantic County Medical Society.

*In Witness Whereof*, The Atlantic City Kiwanis Club has caused this resolution to be signed by its President and attested by its Secretary and duly sealed this 10th day of September, 1931.

Attest:

Walter Hanstein,  
President.

Edward P. Beach,  
Secretary.

Dr. David B. Allman moved that appropriate resolutions be drawn up, on the deaths of Drs. Deaver and Taggart, and spread upon the minutes, and that a copy of such resolutions be sent to their families.

Dr. Conaway stated that Radio Station WPG had notified him that space for the broadcasting of medical talks is being reserved, as in the past, for the society. Dr. Quinn was very much in favor of these broadcast talks, as he said they were a means of bringing legitimate medicine before the public.

Dr. Darnall suggested that the same committee be reappointed. The President accordingly reappointed Drs. Conaway, Silvers and Westcott.

Dr. Quinn brought up the matter of the Credit Rating Bureau which is operating with considerable success for some of our members. Dr. Conaway said that he had joined this bureau and finds that within 24 hr. one can have a report on a man's rating; he also considered the charges for collections reasonable.

Dr. Quinn brought to attention the matter of so many high school boys and girls being excused from gymnasium work; explaining that this gymnasium practice is an essential part of their education and that many colleges will not give full credit to pupils entering physical training courses if they have not received such training, and that other colleges refuse absolutely to accept such pupils in their physical training courses. He urged that the doctors coöperate with him in this matter and give children excuses only when necessary because of some abnormal condition. In order to more fully explain this work, he asked Mr. Thomas A. Barker, Director of the Physical Training Department, Atlantic City High School, to speak:

Mr. Thomas A. Barker: If permitted I will go back 3 years to the time when we divided the students into 3 groups. Group A included children who could take any form of exercise; Group B comprised children who could take only *mild* forms of exercise, excluded from all competition; and Group C was composed of children who were absolutely forbidden any form of exercise whatsoever.

In Group C, the children were given talks on health, by the nurse; on sunny days they were permitted to take walks in the fresh air. However, this did not work out well, as the children took advantage by not *walking*, but *running* around, and some were even caught playing games. So, we have gone back to 2 Groups, A and B. In 1930 there were 84 boys (7%) and 168 girls (15%) excused from everything. This year, already, 146 girls (12%) have been excused, and we feel that, at the rate we are going, there will be 25% of the girls excused from such work.

We are trying to work hand in hand with you. If you place a child in Group B, and if it is a boy he can walk down to the beach on sunny days and possibly play ball, or else just sit down and enjoy the sunshine. If a girl she is permitted to take part in the milder forms of exercise.

If these children are put in Group C, they take 4 periods in the morning, have lunch, and then go down to the gymnasium, if they desire, and dance, which, we feel, is just as strenuous as other forms of exercise, and they then have 3 more study periods without ever going out in the fresh air at all.

We want to sell you the idea of Group B children; please coöperate with us. We are careful that they do not do too much; but we feel that they should have some relaxation. Further, we will be glad to have you visit the High School to see the work that is being done in physical education.

Dr. Quinn then brought up the matter of vaccination, and said he was very much surprised to find that so many children had never been vac-

inated, in spite of the fact that it is a state law that children must be vaccinated before being permitted to enter school. This year a special attempt is being made to have every child vaccinated, and in cases where it has worn off to have it done over again. He urged the members to give their coöperation in this work also.

Dr. Quinn introduced Dr. T. Grier Miller, Professor of Medicine, University of Pennsylvania School of Medicine; Chief of Gastro-Intestinal Clinic, Graduate Hospital of the University of Pennsylvania, who read a paper entitled "Discussion of the Common Causes of Indigestion".

Defining indigestion as the somewhat indefinite but well recognized group of symptoms that ordinarily goes under that name, and excluding from consideration the reflex types dependent upon organic disease outside the digestive tract, Dr. Miller confined himself to those common varieties which result from gall-bladder disease, duodenal ulcer, carcinoma of the stomach, appendicitis, gastric ulcer, and functional disturbances. He had encountered within 4 years 1000 such cases in the wards and the Gastro-Intestinal Out-Patient Section of the Medical Clinic of the University of Pennsylvania Hospital. "The relative frequency of the 6 common causes in this series was compared with that in a group of private patients seen in office and hospital. Gall-bladder disease was found to be the commonest cause of indigestion, in the ward and section groups, while functional disturbance was the most frequent cause in the private series. Of the ward and out-patient group, the relative frequencies were: gall-bladder disease, 35%; duodenal ulcer, 26%; functional gastric disturbance, 22%; carcinoma of the stomach, 7%; appendicitis and gastric ulcer, each 5%.

He discussed the practical procedures available to the average practitioner for making a differential diagnosis, laying particular stress on the great importance of careful history-taking. The physical examination, he thought, was of chief importance in eliminating causes outside the gastro-intestinal tract, such as cardiac and pulmonary disease, cerebrospinal lesions and the infections. Gastric analysis by a combined gruel meal and histamin technic was presented, but no special emphasis was placed upon the test in so far as any of the 6 disturbances under consideration was concerned: it was admitted that consistently high figures following a gruel meal suggest the possibility of duodenal ulcer but are by no means proof of such a lesion and might be found in any of the other conditions. Duodenal drainage was considered of diagnostic value only in a small percentage of the gall-bladder cases, and clearly indicative of such disease only when cholesterol crystals are found. Roentgenologic study was given prime importance among the laboratory procedures, and personal statistics were quoted to indicate its marked accuracy in the diagnosis of gastric and duodenal ulcer, carcinoma of the stomach and gall-bladder disease.

Finally, he presented a brief review of the outstanding diagnostic features of each of the diseases named, again emphasizing the extreme value of a carefully taken history.

Lantern slides, showing statistics on a personal series of duodenal and gastric ulcer and gastric carcinoma cases surgically treated were presented; also some Roentgen ray pictures of rare cases of gastric carcinoma.

Dr. Scanlan: I think that Dr. Miller will be glad to hear this, that I have enjoyed his lecture to-night, enjoyed it quite as much as I did the read-



ing of Alvarez book on "Nervous Indigestion"; and I want to voice my thanks.

*Dr. Andrews:* I, also, rise to express my appreciation of this excellent talk. I was particularly interested in his emphasizing the value of histories. I have preached histories around the hospital so much that I think they now know what I want.

I wondered, in passing, what Dr. Miller thinks of "duodenitis", for I hear a good many clinicians speak of "duodenitis".

*Dr. W. C. Wescott:* I arrived late and missed part of Dr. Miller's paper.

Development of the methods of Roentgen diagnosis of gastric and duodenal ulcer in America is interesting. At one time there were two schools, one depending almost entirely on radiography, and the other on radioscopy, but both doing good work. These schools have been gradually approaching one another, until now practically everyone uses a combination of the two methods. A similar evolution has taken place in Europe, with the difference that, particularly in Vienna, where at one time fluoroscopy was the only method used; now serial radiology is being employed to an ever greater extent. One reason for this change has been the desire to study the mucosal pattern of the partially filled stomach and duodenum under compression. A number of foreign radiologists are convinced that this is a refinement in diagnosis which gives considerably more information. They claim to accurately localize ulcers and diagnose conditions other than ulcer. Furthermore, small fields with compression, give pictures with better contrast and detail. For instance, Akerlund, of Stockholm, has increased his percentage of correct ulcer diagnosis in the duodenum very considerably by the use of this method. The graduated compression with study of the mucosal pattern is just beginning in this country, although it was first employed here many years ago and was then dropped.

I am afraid many mistakes are going to be made unless the observers become thoroughly acquainted with the normal mucosal pattern. The method is a two-edged sword and over enthusiasm is dangerous.

As regards the medicinal treatment of gastric and duodenal ulcers, there are a fair number of reports in the literature of serial observation of patients under medical cure resulting in almost complete disappearance of the x-ray evidence of the lesion. In cases which had 1 or 2 so-called ulcer cures, the recurrence, or failure of evidence to disappear, would constitute rather definite indication for operation.

*Dr. Miller:* I am very glad Dr. Andrews referred to "duodenitis". I have had the same questions in my mind, and thought it would be interesting to look over the histories of conditions so diagnosed by roentgenologists. I found we had 26 cases, and I tried to analyze them with the x-ray reports and they all looked like duodenal ulcers so far as history was concerned. The majority of them had high acid figures. Some were operated on later and there was found a submucosal ulcer.

There is certainly a characteristic fluoroscopic picture, or rather there is a picture of duodenal ulcer. That is the clinical picture, and that is all I can say about it, save that I can refer you to the work of Judd.

What is the difference between gastric and duodenal ulcer? There isn't any difference. I fully appreciate that at the present time they are making a more serious effort to localize the lesion, and I don't doubt that they are doing it better today than 2 years ago, but sometimes they do not seem to be of any practical value.

I don't believe I said that gastric analysis is

worthless. I don't think it is worthless, but you can't put great reliance on it. Anything that is helpful, is something, but it isn't a thing on which you can make a diagnosis. You can determine whether or not many stomachs secrete acids by an ordinary gruel meal. You have to use histamin in some stomachs. We gave too large doses in the beginning to some patients for then we were giving as much as 1 c.c. We now usually give about 0.3 c.c., and we have not had any trouble with that small dose.

Duodenal drainage is a routine procedure in the Graduate Hospital. I think Dr. Bockus feels that duodenal drainage is of more value than I grant, and he has had far greater experience.

### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

The regular monthly meeting of the Atlantic City Hospital Staff was held in the auditorium of the main building, Friday, September 25, at 8.30 p. m. Dr. Milton S. Ireland, president, occupied the chair.

The scientific program was presented by Drs. Samuel L. Salasin, and Philip I. Marvel, Jr., with a report of the Medical Service. Dr. Salasin stated: "During the 3 months' period of service, 151 patients were admitted to the wards; total number of hospital days was 2014. Of the 151 cases, 102 were chronic in nature; such a large percentage of chronic conditions naturally results in a high mortality rate, and the submitted report disclosed 21 deaths. Of these 21 deaths, 8 occurred in the first 24 hours following admission, and all those patients were admitted to the hospital in moribund condition."

### BERGEN COUNTY

Charles Littwin, M.D., Reporter

The first regular fall meeting of the Bergen County Medical Society was held at the Hackensack Hospital, October 16, with about 60 members attending. Dr. Morrow presided. The minutes of the preceding meeting, and also of the meeting of the Executive Committee, were read.

The recommendation for \$5 reduction of dues for 1932 was voted upon and passed.

Dr. Wolowitz reported that the Publicity Committee was organizing its work for the year.

The formation of a "collection bureau" again came up for discussion by Drs. Kils, Corn, Perham, Sarla and King.

Dr. Pallen reported for the Cancer Committee, and Dr. Black on Membership. The following were elected to membership: Drs. Joseph Bono, Luke A. Mulligan, Harold Stedman. The transfer of Dr. Calvin C. F. Bosch was revoked and he returns to active membership.

Applications for membership from Drs. Romola Lyons and Benjamin Witkoff were read.

After a discussion of proposals for the annual dinner it was voted, on motion of Dr. Corn, that the customary special annual dinner be held at a charge of \$3, with any additional expense to come from the treasury.

The program of the evening was taken up first by Mr. Schick, of the U. S. Fidelity and Guaranty Company, who explained the need for 100% membership in our group malpractice insurance.

Mr. J. Louis Neff ably discussed the work of the Nassau County Medical Society, and the importance of a full-time secretary.

The scientific paper was read by Dr. Mather Cleveland, on the timely subject: "The Orthopedic Treatment of Poliomyelitis." (To be published in *Journal* later.) Motion pictures illustrated the results of the various operations.

### CAMDEN COUNTY

R. S. Gamon, M.D., Reporter

The annual meeting of the Camden County Medical Society was held October 6, 1931, in the City Dispensary Building, with Dr. W. J. Barrett presiding.

Resolutions were presented by Dr. Alex. Macalister on the recent death of Dr. James A. Haley, of Gloucester, a Past-President of this society. Resolutions were read by Dr. W. J. Barrett on the death of Dr. Walter H. Smith, of Haddonfield, a member of this society.

Dr. I. P. Davenport, 270 Washington Terrace, Audubon, N. J., was elected to active membership.

The address of the retiring president, Dr. W. J. Barrett, was given; his subject being—"Building Together". This was an exceptionally meritorious paper which propounded the thought of coöperative work among members of the medical profession.

The report of the Nominating Committee was read and the following officers elected: E. G. Hummel, President; A. B. Davis, Vice-President; R. S. Gamon, Secretary; T. K. Lewis, Treasurer; R. L. Sharp, Reporter; G. P. Meyer, Historian; W. J. Barrett, Censor; A. Macalister, Trustee.

The Treasurer reported 133 active members with only 9 delinquent in dues for the past year.

### CUMBERLAND COUNTY

E. S. Corson, M.D., Reporter

The Annual Meeting of the Society was held Tuesday, October 13, at the Cumberland Hotel, Bridgeton. Election of officers resulted in the choice of Dr. Frank Sheppard, President; Dare Woodruff, Vice-President; Secretary, Dr. E. C. Lyon; Treasurer, H. H. Wilson; Reporter, E. S. Corson; State Delegate, H. H. Miller; C. P. Lummis, Chairman Nominating Committee.

The literary program was one of the most practical presented for a long time. Dr. George M. Dorrance, of Philadelphia, discussed the timely subject—"Traumatic Surgery". The gist of his subject was "The Little Things Are Primary". Do not trust too much to the care of assistants; they may be using theories or treatments based largely on old time textbooks. Iodin is now discarded as beginning disinfectant. In a clean cut, it increases the irritation which, when its properties are gone, leaves an easily infected wound. Plain soap and water and benzine or Dakins Solution produce an ideal condition for applying the dressing. It is a good thing to apply a splint for moderate cuts. Tendon sutures require infinite care; of 17 cases 11 became infected. Try and form a sheath of fat or fascia and begin early movement to prevent adhesion. Automobile accidents are increasing the traumatic cases. In fracture of the skull, trephining is not the main thing. Consult the eye-ground as a guide. Tapping cerebrum does not help. Make a small opening at the base and insert a small blunt needle. Traumatic epilepsy is a rare thing. In fracture of tibia and fibula, the old fracture box is inefficient; make a trough of plaster conformed to shape of limb. Elevation is the essential thing for fractures of the femur. Ex-

tension with adhesive straps is not as effective as ice-tongs or pin. With local anesthesia, the os calcis may be readily drilled for extension of the tibia and fibula, and back of the knee joint for extension of the femur. Use the bed, elevated high at the foot, for counter extension, and avoid pillows under the head; 24 to 48 hours will overcome the muscle spasm. Get patient up on crutches as soon as possible. In fracture of upper jaw, open the antrum to secure drainage. In lacerations of the skin turn out the edge so as to avoid scarring. Make them stick up. Put a sea-sponge on side of face, wet with bichloride and apply a 3 in. bandage. It is more comfortable and holds better than 2 in. Save all parts of nose and ears. In case of burns, use opium if needed. Don't let patient suffer. The leukocytosis is the tell-tale of toxic danger; if above 50,000, look out. Give plenty of water by mouth and normal salt solution under the skin. Cut across the hard cicatrix. A full thickness graft is now possible. Put infected wounds in the sunlight. In case of fracture of the femur after 45 years of age, defer operation; better a little deformity than assume too much risk. The "no touch" principle has a wide range of application.

The Address by Dr. Reba Lloyd, the Retiring President, reviewed an active experience of 30 years' practice. It was full of humor and pathos. The life of the first woman doctor in Bridgeton required tact and patience to overcome the prejudice against women doctors. A reference to past medical confrères brought a touch of sadness. The clock of life is wound but once; live, love, toil with a will, for no one knows when it will be still. Our women doctors are ambitious; not a lazy one in the bunch. The "country doctor" is still loved and loves the work, but hopes that some time all telephones will be disconnected.

### ESSEX COUNTY

E. LeRoy Wood, M.D., Reporter

About 275 members attended the 116th Annual Meeting of the Essex County Medical Society held Thursday evening, October 8, at the Washington Restaurant, Newark. The business meeting was preceded by a Dinner arranged by the following committee: Drs. J. Irving Fort, Thomas W. Harvey, Jr., W. H. Areson, Edgar A. Ill, and John Dane.

The Retiring President, Dr. Henry C. Barkhorn, presided, and in his address commented on the problems of the medical profession. (Dr. Barkhorn's address will be published, in full, in the December *Journal*.)

The Secretary, Dr. Frank W. Pinneo, read a summary of the previous meetings. Dr. Francis R. Haussling, Chairman of the County Aid to Hospitals Committee, said his committee members did not feel they could recommend that semi-private hospitals be assisted by county taxation, but they did recommend that each municipality should bear the financial burden for care of its own indigent sick.

Dr. H. H. Satchwell, Chairman of the Post-Graduate Medical Instruction Committee, and a member of the State Society Committee, reported that 3 courses had been given for 8 weeks under auspices of the State Society and Rutgers University. Of the 65 enrolled, 75% had expressed themselves as fully satisfied.

Dr. John H. Bradshaw, Chairman of the Publicity Committee, reported the issuing of Bulletins announcing 3 meetings of the society. These Bulletins, in addition, contained short comments on



medical economics, and a few words of wisdom from some former president. The purpose of the Bulletin is to sell the county meetings to the profession and to be helpful in their daily problems.

Dr. Carl H. Ill, President of the Maternal Welfare Commission, reported upon the analysis of the obstetric deaths in the county. The commission had organized an obstetric course, by Dr. Watson—1000 physicians attended and received it so enthusiastically that they requested continuance of similar work.

Dr. John F. Hagerty, President of the Medical Society of New Jersey, spoke briefly to fellow-members of his home county about coöperation with the state organization.

Drs. Frederic J. Quigley, Second Vice-President; Henry O. Reik, Executive Secretary and Editor; and J. Bennett Morrison, Secretary; all officers of the Medical Society of New Jersey, were introduced. Dr. Morrison spoke briefly about the Workman's Compensation Act, saying that as the member representing the medical profession on the Commissioner of Labor's Board to revise the law, he would welcome any ideas from doctors for improvement of the present law.

The Treasurer, Dr. Robert H. Rogers, rendered his report, which had been checked and found correct by the Auditors, Drs. Benjamin A. Furman, and Anthony Charles Zehnder. Dr. Rogers stated that the dues would be \$20 for the year 1932.

Dr. Wells P. Eagleton, unable to be present, had arranged to have the following open letter read to the society before being presented to Dr. Barkhorn.

Dr. Eagleton's letter to Dr. Henry C. Barkhorn on retiring as President of the Essex County Medical Society:

"While abroad this summer, and thinking over the work that is being done for the medical profession in New Jersey, I determined to express publicly to you my appreciation of your efforts during your presidency in trying to make the profession realize its duty toward the younger members. This, you have done by endeavoring to interest the members of Essex County in the medical problems that are of vital economic importance, problems which must be solved by the profession and by them alone, if organized medicine is to be of any real service to the individual physician, and if the coming generation of doctors is to continue to have a decent remuneration for service.

I believe that the main objective of organized medicine should be protection of the licensed physicians of the state, and of their economic, ethical and spiritual welfare.

You have coöperated with the Council, and by this concerted action have avoided personal exploitation. In this way, publicity has been in the interest of the profession as a whole, whereas too many medical leaders have used their positions to exploit their own professional work.

Essex County doctors are indebted to you for devoting the meetings to discussion of the economic and social problems now before the profession, instead of having technical papers which are of purely academic and scientific importance, which I believe should be dealt with by the local societies.

Speaking as the senior acting Trustee of the Medical Society of New Jersey, and as one of the oldest of the former Presidents of the Essex County Medical Society, I offer you my congratulations."

(Signed) Wells P. Eagleton.

Dr. James H. Lowrey, Chairman of the Illegal Practitioners Committee, rendered his report. He

reminded the society that enforcement of the Medical Practice Act is vested solely in the State Board of Medical Examiners, and pointed out that local societies and boards of health have no authority. Dr. Lowrey showed the work that is being done by the State Board coöperating with the local committee. This report was comprehensive and excellent.

The Committee conducting the election of officers consisted of the following: Alfred Stahl, H. Roy Van Ness, Edgar P. Cardwell, Charles G. Crane, Herbert A. Schulte and Joseph W. Gardam. The polls were open from 7.30 to 10 p. m. and the following officers were elected:

President, James H. Lowrey; Vice-President, Dr. William H. Areson; Secretary, Frank W. Pinneo; Treasurer, Robert H. Rogers; Reporter, E. LeRoy Wood; Councilors, David A. Kraker, Charles F. Baker, Edgar A. Ill, and Edward W. Sprague. For Nominating Committee of State Society, Alfred Stahl, Member, James H. Lowrey, Alternate.

Delegates to the State Society: John F. Condon, T. W. Corwin, R. H. Diffenbach, Ambrose F. Dowd, C. B. Griffiths, E. Zeh Hawkes, Charles L. Ill, A. J. Mitchell, E. D. Newman, G. B. Philhower, E. H. Snively, Edward W. Sprague, Theodore Teimer, E. G. Wherry.

Alternate Delegates: John V. Bissett, L. W. Brown, F. R. Carbone, Philip Conlon, H. F. Cook, Elbert A. Curtis, J. I. Echikson, Albert S. Harden, Lee W. Hughes, Herbert M. Ill, H. H. Kessler, Clement Morris, S. A. Muta, E. L. Smith.

The Nominating Committee had been Drs. E. G. Wherry, E. W. Erler, B. H. Greenfield and A. C. Zehnder.

Dr. R. N. Connolly, Chairman of the Ethics Committee, said he was happy to report that he had received very few protests about the conduct of his confrères. One member who made extravagant statements in the public press received advice from the Ethics Committee.

In the absence of Dr. Floy McEwen, of the Necrology Committee, Dr. John F. Hagerty read the list of the members deceased during the year, and the society stood in reverent silence. At the meeting was distributed, in booklet form, a printed list of Memorials of those members of the Essex County Medical Society who died between September 4, 1929, and December 31, 1930.

Dr. E. G. Wherry, Chairman of the Milk Commission, reported the satisfactory operation of Woodbrook Farm which produces Certified Milk under the supervision of our Commission.

Dr. H. Roy Van Ness said that the monthly ballots for new members constituted his committee report, 61 men having been passed during the year.

The tellers for the election of new members, Dr. Francis C. Weber and Dr. Allan O. Godfrey, reported the following elected:

William Berger, 268 No. 7th Street, Newark; William Chentiz, 15 Belmont Terrace, Newark; Roland V. De Michele, 148 Bloomfield Avenue, Newark; Henry A. Davidson, 31 Lincoln Park, Newark; Robert Jonitz, 157 So. Grove Street, E. Orange; S. W. Kalb, 316 Renner Avenue, Newark; Melville Graves Kilborn, 64 Rollinson Street, West Orange; Cyril S. Kirkby, 128 Broad Street, Bloomfield; Abraham Kolodin, 147 Franklin Street, Bloomfield; Manfred Kraemer, 186 Clinton Avenue, Newark; Alexander Marcus, 466 Ferry Street, Newark; Zelda I. Marks, 431 Florence Avenue, Newark; Abraham Mendelson, 68 Treacy Avenue, Newark; C. P. Opdyke, 10 Summit Road Verona; Gordon McC. Opdyke, 10 Summit Road, Verona;

W. Ashton Roberts, 9 Forest Avenue Caldwell; David Shor, 32 So. Munn Avenue, E. Orange; Herbert S. Talbot, 158 Harrison Street, E. Orange.

### Academy of Medicine of Northern New Jersey

Adrian Ralph Kristeller, D.D.S., Secretary

The Academy of Medicine of Northern New Jersey has, during the summer, completed extensive alterations in its home for the convenience of its guests.

A new plan is being attempted this year upon the suggestion of the President, Dr. Wells P. Eagleton, which is: holding of clinical meetings in hospitals in northern New Jersey under the auspices of the individual sections.

The program for the ensuing year has been tentatively arranged by the various sectional chairmen.

The time of the council meetings is varied in order to give active support to one section every month.

The guest for the first stated meeting will be Dr. Paul Titus, of Pittsburgh, Pennsylvania, an outstanding obstetrician of the middle-west.

At the last election, the office of Secretary Emeritus was created, at which time, following a justified and glowing tribute, Dr. Emanuel D. Newman was unanimously elected to that office.

### October Meeting

A. Russell Sherman, M.D., Reporter

A meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey, was held Monday evening, October 19, with Dr. Charles W. Buvinger presiding and 25 members present. The Secretary, being unable to remain, was excused after reading the minutes of the previous meeting, and the Chairman appointed Dr. A. Russell Sherman to act in his stead.

The meeting was opened with "Clinical Reports".

Dr. Norman W. Burritt called attention to the apparent increasing frequency of agranulocytic angina, and described a case seen recently, with a fatal termination.

Dr. James Fisher reported a case of "Gonorrheal Conjunctivitis" treated by subconjunctival injections of Pregl's iodine solution.

Dr. B. M. Howley spoke of a patient operated on for cataract in the presence of a 4 + Wassermann.

Dr. E. S. Sherman said that inasmuch as a Wassermann is not usually part of the routine examination of a cataract case, there are doubtless many such operations performed on patients with a positive blood Wassermann, which, in his opinion, is no contraindication to operation.

Dr. James W. White, Professor of Ophthalmology at the New York Post-Graduate Medical School, read a paper on "Hyperphoria; Its Diagnosis and Treatment", saying in part: There are certain precautions to be observed in the diagnosis of hyperphoria. First comes care in use of the various tests employed, and the interpretation of our findings: for 98% of hyperphorias are due to a muscle weakness, with or without secondary contractions, and it is of the utmost importance, especially if surgical treatment is contemplated, to determine accurately which are the offending muscles. There is sometimes a difference between the near and distant findings; explained by the fact that in movements of elevation and depression, the vertical muscles act most powerfully at a distance, while the obliques exhibit most strength at close range. In determining the amount of hyperphoria, the screen and parallax test is used

for distance and near, first straight ahead, then in the direction of the fields of action of the elevator and depressor muscles. A tangent screen is not necessary for diagnosis but is useful in observing the progress of a case. One should beware of errors resulting from lenses poorly centered in the trial frame.

The treatment of hyperphoria can be covered by no hard and fast rules, especially rules concerning the amount of prismatic correction to be given. Refraction errors should be corrected and certain general disturbances, such as intestinal toxemia, taken care of. Surgery should be used only after thorough examinations have shown conclusively the muscle or muscles affected, and after the operator understands what his operation is intended to accomplish. Dr. White showed some lantern slides of patients with vertical deviations, some of which were corrected by operation.

A "Dutch Treat" Dinner at the Elks' Club, to greet the speaker of the evening, preceded the meeting.

### GLOUCESTER COUNTY

Henry B. Diverty, M.D., Reporter

The Gloucester County Medical Society met on October 15, in the Hotel Pitman. Members present were: Drs. Ralph K. Hollinshed and Edwin Ristine, of Westville; I. W. Knight and W. J. Burkett, of Pitman; H. L. Sinexon and C. C. Sheets, of Paulsboro; E. E. Downs, Duncan Campbell, C. A. Bowersox, H. B. Diverty, Fuller Sherman, of Woodbury. Dr. Miller was the delegate present from Millville.

A most excellent address was made by Dr. Donald C. A. Butts, of Hahnemann College, Philadelphia, his subject being "Emery's Research Work on Cancer", which has been carried on for the past 13 years. Refreshments were served at a late hour to members of the Society, guests and attendants, and members of the Woman's Auxiliary.

### HUDSON COUNTY

Harry J. Perlberg, M.D., Secretary

The regular meeting of the Hudson County Medical Society was held at the Carteret Club on Tuesday, October 6, with the President, John M. Cassidy, presiding.

Dr. Cassidy made a few remarks relative to his relinquishing the chair, thanking the members and officers for their support, requesting that they continue their support to his successor, and the following tellers for the election were appointed: Drs. Tidwell, Ballinger and Lupin.

Mr. Debus, from the Druggists' Association, was granted the floor, and spoke concerning the prescribing of proprietary compounds by physicians; patients read these names and eventually prescribe for themselves. An association is being formed of all reliable pharmacists, who must agree to a code of ethics which is stringent and will be strictly enforced. They are to discourage the practice of self-medication. The names will be submitted to the medical profession and the profession will be circularized with Bulletins describing the different U. S. P. and N. F. preparations.

Report of the meeting of the Executive Committee, held on May 25, was read. The committee had recommended an additional allowance of \$500 to the Publicity Committee. It was regularly moved and seconded that this recommendation of



the Executive Committee be approved. Carried.

There was next a report of the Executive Committee meeting held September 28. A plan had been presented by the Medical Credit Bureau wherein information as to the credit rating of a patient was to be submitted by the Bureau at a cost of 25c per name, where the names were listed with the Bureau, and a charge of \$1.25 would be made where the case had to be specially investigated. The Executive Committee voted to recommend this plan to the society. It was also voted to publish a list of unpaid members in the Bulletin, at the discretion of the Treasurer and Secretary. It was regularly moved and seconded that all the recommendations of the Executive Committee be approved by the membership at large. Carried.

A diphtheria campaign was conducted in Hudson County from May 1 to July 1 of this year. This is said to be a precedent in that it is the first body of medical men, alone and unassisted by outside interests and without the contributions of lay organizations, to have conducted such a campaign successfully on appropriations made by a Medical Society alone (a compliment by Dr. Armstrong, of the Metropolitan Life Insurance Company of New York).

There were reported 5000 immunizations by the private physicians, a factor that we stressed in all publicity in the Public Press, Public Addresses, Moving Picture Films in the Theaters of Hudson County, Social and Service Clubs, Chambers of Commerce, and wherever and whenever anyone would lend us his ears. This number does not include the immunizations in the Clinics, Hospitals, or the Fire Houses. Again, it only includes those cases which were tallied from the returns made by the men to this Committee; but should include 1 case of olecranon bursitis which I developed from telephoning for the rest of the reports.

Dr. Maras discussed the matter of the new Consultation Service, especially at Mt. Sinai Hospital, which is a consultation service in coöperation with the family physician. It was felt that this would benefit the so-called white collar class. He also stressed the continued Medical Education, as advocated by Dr. Hartwell, of New York, and discussed the regulation of specialization which he felt must be taken care of by the medical profession rather than by lay people; and also the matter of the \$250 deposit required of all physicians sending patients to the Margaret Hague Maternity Hospital. It was regularly moved and seconded that this report be received and filed. Carried.

The Telephone Committee report submitted by Dr. Cosgrove read as follows: Your Telephone Committee, consisting of Drs. Alexander, Pagliughi, and Cosgrove, met September 22. This Committee recommends that the action of the Society previously taken, limiting advertising in the telephone directory, by its members, to the insertion of telephone numbers and office hours, be not extended to include other details, such as specialties, special society memberships, hospital connections, etc.

The Committee further wishes to report that it has written the Telephone Company requesting that proofs of future classified lists of physicians and surgeons, in its telephone directory, be submitted to the Secretary of the Hudson County Medical Society for correction, prior to each printing of the directory.

It was regularly moved and seconded that this report be received and filed. Carried.

Delegates report by Dr. Alexander, Chairman. The delegates held 2 meetings, one on Monday,

May 25, in Jersey City, and the second on June 3, in Asbury Park. At the May meeting the various resolutions to be presented at the Annual Meeting of the State Society were decided upon after considerable discussion. At the June Meeting a committee on resolutions was appointed whose function it was to edit the resolutions and prepare them for presentation at the meeting.

The Official Transactions of the Medical Society of New Jersey gives a full report concerning the resolutions presented by Hudson County, and the action that was taken by the society. I refer you to your copy of the transactions rather than burden you with a more detailed report.

You will be pleased to learn that 23 out of a total of 29 delegates were present in Asbury Park. Permit me to thank all delegates and alternates for the courtesy and coöperation which was extended to the chairman of the delegates.

*Pre-School Examination Committee:* Dr. J. Schapiro reported on the work of this committee at the May meeting. A resolution gotten up by this meeting was presented to the State Society in June.

It was the opinion of this committee that this work should be done by the family physician and not by the school physician. It was believed that the schools should be utilized as a medium for educating the public as to the value of pre-school examinations. For this purpose, a sub-committee was appointed to draft a circular letter, which is now in process of formation, and if approved by the society, it will be distributed to families where there are children about to be registered in the schools, twice a year—the middle of December and May. It was the opinion of the committee that the expense for this should be borne by the respective Boards of Education in each municipality.

As to the physical record card, we feel that the County Society should bear the burden of printing and distribution. In addition to that, the committee is of the opinion that in order to make this work operative to its greatest advantage, the Boards of Health in each municipality should be induced to pass an ordinance making it compulsory to have children examined by their family physicians, or, if in indigent circumstances, to have this done at a hospital clinic or keep-well station.

The above recommendations will necessitate securing the coöperation of the school authorities and Board of Health officials. We believe, however, that with the help of our fellow-members who are Health Officers and Medical Inspectors of Schools, such coöperation can easily be secured.

At the next meeting we hope to be able to present the form letter and card referred to above, and report further steps taken by this committee.

It was regularly moved and seconded that the report be received and filed. Carried.

Dr. Alvin Kuhlman raised the question of ethics in the medical profession and stated that he would have considerable to say at a subsequent meeting.

Dr. Abram Weiss stated that food handlers are required by law to have a card certifying to their physical condition, but that there is no law concerning domestic servants. He felt that the Society should find some way to remedy this condition. It was regularly moved and seconded that the president appoint a committee to study the situation and report to the society. Carried.

The following applicants for membership have been reported favorably by the Board of Censors, and were declared elected by ballot cast by the Secretary: Drs. Benj. J. Macchia and Grace W. Kahrs, both of Jersey City.

The following officers were elected—William W. Brooke, President; Louis A. Pyle, Vice-President; Chas. B. Kelley, Treasurer; Harry J. Perlberg, Secretary; Edward G. Waters, Reporter.

The speaker of the evening was Dr. Snedecor, of Bergen County, who chose as his subject, "Medical Problems Afloat and Ashore". Dr. Snedecor made a "trans-atlantic flight" in a 60 foot yacht last summer, shipping as yacht doctor and helper on the starboard watch. He left on July 4, on the "Mistress", indelicate title, from Newport, in a Trans-Atlantic Race limited to boats between 45 and 72 feet in length. The boat was captained by George Roosevelt, and the first mate was Sherman Hoyt. Dr. Snedecor detailed the provisioning of the boat, from the eggs which lasted 2 weeks before they began to smell, to the "no ice". The best lavatory was buried under 4 feet of coal used for cooking. The ocean was often as calm as a mill pond for hours, but there were a few good blows on the way over. Unfortunately (?), there was no opportunity for Dr. Snedecor to demonstrate his professional attainments, so he spent all his time sailing.

After landing at Plymouth on July 24—the progress of the yacht being shown in still pictures—Dr. Snedecor spent some time in England. He made a visit to Parliament and while there heard considerable talk about the "Health Insurance Act", which he thought was working out about as well as the dole.

Dr. Snedecor, speaking in this vein as Counselor of our Judicial District, stressed the need of special interest and activity of County Society members in matters of public health. He also mentioned the matter of specialists and specialization, which may be taken care of by the Waters' resolution, which is in committee for report at the next state convention. The matter of duties, salaries, qualifications, etc., of school physicians came in for comment, since school health precedes all other school requisites.

Clinics, said Dr. Snedecor, are ethically wrong and economically unsound. It is time to decentralize, rather than centralize, our activities. The transference of patient-doctor relationship to clinics is incompatible with intelligent, interested medical service. One-eighth of the patients in the United States were treated in clinics last year by 25% of the nation's physicians. A public health examination campaign was suggested as valuable.

Finally, now that there is less in amount to do, by virtue of times and conditions, Dr. Snedecor suggested we give more time to the individual patient, give better diagnoses and offer better treatment, in conjunction with taking more post-graduate study to better equip ourselves for the work.

### Bayonne Hospital Clinical Conference

Maurice Shapiro, M.D., Secretary

The regular meeting of the Clinical Conference of Bayonne Hospital was held Monday evening, October 5, at 9.30 p. m., at the Bayonne Hospital. Dr. Weiss acted as Chairman, in the absence of Dr. Donohoe, and Dr. Shapiro as Secretary.

Dr. Weiss, for the Medical Service, reported a series of cases.

Case No. 1. "Nephritis with Thrombo-Angiitis". J. McG., adult, male, aged 34, entered the hospital August 18 stating that he had recurrent attacks of "phlebitis" since 1927, which he thought was the result of an automobile accident while serving

with the A. E. F. in France. There was nothing remarkable in his past life until 6 years ago when he developed an abscess in the right leg, which was opened and later completely healed. After that he had been feeling perfectly well except for an occasional swelling of the left leg. In January of this year he suddenly was taken ill with cough, pain in the left chest and spitting of blood. His condition was diagnosed as pleurisy with effusion and possible infarct of the lung. X-ray report showed an infiltrative process of the lower lobe, bronchopneumonic in character, and thickened pleura. Repeated sputums were negative for tuberculosis, and his urine showed a 4 + albumin. During his 4 weeks stay the left leg swelled up twice, which we thought was due to recurrent attacks of thrombophlebitis. He apparently got well and left the hospital in February. There followed several attacks of swelling, always of the same leg, for which he was treated in the Jersey City Hospital. On August 18 of this year he re-entered our hospital, with swelling of left leg and general weakness. Heart apex not visible; point of maximal impulse in fifth interspace close to the left parasternal line; sounds clear. The lungs were clear except for flat percussion note over the left lower lobe. Abdomen showed presence of considerable free fluid, flatness in the flanks, tympany on top, and a fluid wave. No pain on pressure. Viscera could not be palpated. The abdominal wall itself was edematous; extremities edematous and pitted on pressure.

Urinalysis: Specific gravity 1.030; albumin 4 + and sugar negative; occasional red and white blood cells. Wassermann and Kahn negative. Swelling seemed to progress rapidly, involving the entire left leg, then the right, finally extending to the abdomen and both sides of the thoracic wall, and the axilla.

Dr. Von Deesten, in consultation, suggested a high protein diet, larger amounts of urea by mouth, and thyroid extract. Patient seemed to improve on this treatment, the edema decreasing gradually, output and intake averaging 1 to 3 this time instead of 1-5. On September 11, patient was tapped and 4000 c.c. of milky, cloudy, pseudochylous fluid removed.

Diagnosis was chronic diffuse glomerulonephritis in association with a nephrotic element.

Dr. Antapol, discussing this case, said that there is no nephrosis in this case because there is no change in the albumin protein ratio. There is blood in the urine. All these things point toward glomerulo nephritis.

Dr. Lipshutz treated this patient for thrombophlebitis of renal vessels, and he was also seen by Dr. Harvey in these attacks. Consensus of opinion considered it as thrombophlebitis of the renal vessels with subsequent glomerulonephritis.

Case No. 2. "Pernicious Anemia". M. P., male, aged 54, was admitted on September 3 with the following history: Jaundice for 7 years. Began with double pneumonia and simultaneously became jaundiced and he was confined to bed for 6 months. He felt better for 1½ years, and returned to work; then sick again and entered the hospital for the first time 5 years ago. On the fifth admission a diagnosis of atrophic cirrhosis of the liver and chronic myocarditis was made. On February 3, 1930, he entered the hospital again with various complaints, and blood count returned a picture of pernicious anemia. The gall-bladder and gastro-intestinal series were negative. He was placed on liver extract, but with very slight improvement. He returned home in April 1930 and worked until August 1931, when his present symptoms



appeared; pain and numbness in the lower extremities, pain in the lower quadrant of abdomen, nausea, vomiting, progressive weakness; and loss of weight. Physical examination showed nothing remarkable except a yellow discoloration of the skin.

A diagnosis of pernicious anemia was made upon the blood examination and he was placed on liver extract. From then on patient improved rapidly, his yellow color disappeared almost entirely, was able to walk around, and was discharged October 2 in good condition.

*Case No. 3. "Encephalitis Lethargica".* W. S., male, aged 50, entered August 20 with the complaint of having suffered from recurrent attacks of headaches for the past 10 years, becoming more intense in the past 2 weeks, usually starting in the eyes and radiating to the occiput, and sharp and boring in character. He wears glasses, but they do not seem to correct his condition. There is a history of chronic alcoholism, but no history of epilepsy, hysteria, neurasthenia, dyspepsia, gout or rheumatism, malaria or other infectious diseases.

Acromegalic features; round symmetric face; pupils react to light and accommodation; no nystagmus. No adventitious chest sounds or râles. Heart regular and no murmurs.

On admission he appeared mentally dull and depressed. The next day he began to sink gradually into a semicoma, but was able to take food and drink. After a few days his stupor became deeper and his pupils widely dilated and rigid. The eye-grounds then revealed a slight papilledema on both sides with hemorrhagic spots on the left. Could be aroused only with difficulty. The arms, especially the right one, were somewhat stiff and the reflexes exaggerated. Passed urine and feces involuntarily. While usually quiet, at times he became restless, with rolling movements. He remained in that state for about 2 weeks. There were no limitations of ocular movements, no paralysis, no tremor, no sensory disturbance, no stiff neck and no Kernig. On August 26 a spinal tap was made: globulin was normal, sugar reduction normal, cell count = 7. Three weeks after admission he began to improve, gradually his mind became clear, he took food better, and urine and feces were passed voluntarily. At first a diagnosis of a possible cerebral tumor was made but in view of his recovery the diagnosis was changed to encephalitis lethargica, and he was discharged September 15 in good condition.

*Case No. 4. "Tuberculous Meningitis".* W. W., male, aged 45, entered July 15, stating that in June he had grippe which confined him to bed for 3 weeks; joints became painful and swollen, and medication did not give relief. Used to drink about a quart of whiskey daily. On July 20 his joint pain subsided, but temperature was still ranging between normal and 102°. On July 22 a pyelogram revealed a large distended kidney pelvis on the left side, with blunted terminal calices; diagnosed by Dr. Woodruff as infective pyelectasis. Consequently, patient was operated on July 31, and the left kidney removed. On August 11 the wound was completely healed, but patient failed to show any improvement. His teeth were x-rayed and the report was negative except for some retained roots. On August 15 patient became irrational, temperature ranging between normal and 103°, and septic in character. Radiograph of chest then showed a bronchopneumonic infiltration in both upper lobes. Blood culture was negative. Patient's condition was getting worse and on September 3 he was transferred to the Medical Service. Blood culture, again ordered, showed the

presence of *Streptococcus viridans*. On September 10, patient was seen by Dr. Von Deesten, and he suggested a spinal fluid examination for tuberculosis. Report on spinal fluid showed no acid-fast bacilli on smears; globulin increased; glucose decreased; culture, no growth. Patient's condition remained unchanged. On September 15, he presented a picture of meningeal irritation: Rigid neck, positive Babinsky, and Kernig's sign. On this ground, a diagnosis of tuberculous meningitis was made. On September 24 he was again seen by Dr. Von Deesten and, reading the chest plates, he thought there was a tuberculous process in both upper lobes, in addition to a meningitis of the serous type. At present the patient is markedly emaciated, irrational, his temperature irregular; and the diagnosis is serous meningitis with pulmonary tuberculosis, but this cannot be definitely proved.

### Clinical Society North Hudson Hospital

J. Africano, M.D., Reporter

The regular meeting of the Clinical Society was held Tuesday, October 20, with Dr. E. Luippold acting as chairman. The report for the month of September was read by Dr. Tannert: total discharges 229, admissions also 229; deaths 21, of which 10 were surgical, 9 medical, and 2 urologic; 4 autopsies were performed.

Dr. Luippold urged members of the Society to attend, with all their friends, the Charity Ball to be held at the Elk's Club December 2, 1931; it is the annual social event of the community, and no one is excluded; it is sponsored by the Child Aid League of North Hudson Hospital, and promises to exceed its popularity and success of last year.

*Dr. W. Braunstein* presented the heart specimen from a case of "Aortic Stenosis" that came to autopsy; the aortic orifice was narrowed, and valve surfaces showed marked calcification and nodular formation—however, not in the beaded linear arrangement so characteristic of infection; a rheumatic or syphilitic lesion would have caused destruction of the valve with resultant insufficiency. As this happened late in the life of the patient, who was arteriosclerotic and had third-stage glomerulonephritis with passive congestion of the liver and spleen, Dr. Braunstein classified this case in the indeterminate group—the lesion in the valves being a senile degenerative calcification; the left ventricle was concentrically (the same uniformly throughout) hypertrophied, and the right auricle and right ventricle dilated.

*Dr. Klaus* discussed a case of "Squamous Cell Epithelioma of the Bladder", which was twice treated by fulguration; later, following removal of a tooth, swelling and infection of the right antrum developed, with chills and fever, and pathologic studies revealed metastasis to the superior maxilla; besides which the patient succumbed to the toxemia of secondary infection.

*Dr. Tidwell* described the findings in a case of "Unusual Cecocolic Intussusception" (usually these cases are ileocecal or ileocolic) clinically diagnosed correctly before operation, and confirmed by the roentgenologist with barium enema; the cecum was found rotated around the appendix, which was gangrenous, and invaginated into the ascending colon. (An interesting discussion by Dr. Klaus concerning intussusception in children, based on his experiences with several cases, will be found in the July issue of the *Minute Monthly*, and July issue of our *State Society Journal*.)

Dr. D'Acerno reported the case of a male, aged 33, complaining of sharp pains in the lumbar spine, who had some bladder trouble at the age of 20, and a left scoliosis gradually becoming worse. On July 19, left posterior diaphragmatic pain led the first physician who saw him to diagnose pleurisy. Dr. Pearlstein stated the patient was referred to him for x-ray and fluoroscopic examination, and that the marked scoliosis made interpretation difficult, as the diaphragm was lacking its normal position and curve on the left side; he suggested attention be directed to the renal system. When Dr. D'Acerno saw the patient, the symptoms were more definitely genito-urinary; i.e. excruciating pain in the left lumbar region radiating anteriorly to the abdomen, and to the penis and thigh at times, with septic temperature, 98-104°. Pott's disease was excluded by Dr. Africano. Patient was hospitalized, and cystoscopy attempted by Drs. DeMerritt, D'Acerno and Myerson; the right ureter was found with difficulty, and the left not at all, in spite of several attempts; furthermore, no indigo carmine issued from the left side, so far as could be determined. Following cystoscopy, patient had oliguria; finally anuria; became uremic and succumbed. Operation for perinephritic abscess was not attempted on account of the generally poor condition of the patient; 2 surgeons advising against it. Dr. D'Acerno believes an original acute pyonephrosis, by extension through the fibrous capsule, developed into a perinephritic abscess, which in turn broke the fatty capsule, forming a subdiaphragmatic abscess, which caused the obstinate hiccough before the end. The case is of unusual interest from the diagnostic standpoint, and remained obscure till very late in the course; at least 10 physicians and surgeons, with every clinical and laboratory means at disposal, saw the patient, and it is speculative as to whether exploratory lumbar incision would have helped. Unfortunately, permission for autopsy could not be obtained.

Dr. Eckert. "Staphylococcus Septicemia". J. C., aged 8, admitted to service on August 27, was complaining of severe pain in the right thigh. One week before, he had a laceration of the right arm, the result of a fall. The wound became infected and was incised by a physician; temperature dropped to normal for 2 days and on the third rose to 103°. Then the left thigh and leg began to swell and there was extreme pain on active and passive motion of both knee and hip joints. The abdomen was normal except for tenderness on pressure in the left lower quadrant, just above Poupart's ligament. The right arm showed an incised wound above the elbow posteriorly, surrounded by an area of subsiding inflammation. The left lower extremity was flexed at the hip and knee; extension was extremely painful. The left thigh appeared swollen and red, and palpation elicited tenderness from Poupart's ligament to a point below the knee. Blood count: R.B.C., 4,192,000; W.B.C., 12,600; polys., 70%. Blood culture on September 5 was positive for *Staphylococcus aureus*.

Several diagnoses were considered, such as septic arthritis, osteomyelitis of femur, and a deep abscess, the last being more favored. On account of patient's poor condition, operative procedure was decided upon, and a vertical incision was made over the lateral aspect of the thigh from 1 in. above to about 4 in. below the greater trochanter. No infection of the bone was seen. By blunt dissection through the rectus femoris anteriorly to Scarpa's triangle, a large abscess cavity was entered and drained. Temperature dropped

to 99.6° that day but then rose to 104°. The drainage from the wound was rather profuse for the next few days but temperature remained fluctuating between 101° and 103°. On September 11, a blood transfusion of 50 c.c., citrate method, was given, which resulted in an immediate marked improvement. Three days later, another small transfusion was given and further improvement was noted.

The patient improved rapidly and was discharged on September 30. This case demonstrated the various manifestations and diagnoses possible as the result of a bacteremia. The value of repeated, small, blood transfusions in a blood sepsis was also demonstrated.

Dr. W. J. Sweeney. "Scirrhus Carcinoma of the Male Breast." H. W., male, white, aged 38, laborer, while working June 20 was struck by a piece of oak sheathing, wounding the right breast. Contusion was seen by me 2 days later and hot compresses and ichthyol ointment advised. Swelling decreased; no axillary glands palpable but a hard lump remained in the breast. He was seen at weekly intervals by Dr. Eckert until August 1. He stated most positively that previous to injury he had never had any trouble with breast and it was never involved in any inflammatory process. Breast painful on palpation since original accident, but has received additional blows to breast as he continued working. In the region of the nipple there is a small area of ulceration, the base of which was some dried secretion. There was a small nodule  $\frac{1}{2}$  in. diameter just above the breast; surrounding tissue for a diameter of 2 in. and the nodule above the breast were of a stony consistency; 2 stony hard glands in the right axilla; no infra- or supra-clavicular glands felt. X-ray picture was negative to chest involvement. On August 5, the mass was subjected to radium knife excision. No bleeding. Frozen section report: Scirrhus carcinoma of the breast. The patient's company was notified and he reentered the hospital August 10 for a radical Dever operation. Due to the death of his wife on September 3, he was discharged for outside treatment.

The interesting features in this case are the rapid growth of the tumor, the presence of mass before injury and its aggravation by trauma, and compensation.

Dr. W. J. Sweeney. "Papillary Carcinoma of the Male Breast". Mr. F., white, aged 63, Austrian, manufacturer, was admitted September 16, with the chief complaints of mass in the right breast and swelling under the right arm. Family and past history negative.

Patient noticed upon awakening one morning that his pajama coat was blood-stained, and he believed that during the night he scratched the nipple of the right breast. One year later he consulted a physician, who advised to leave the condition alone; the mass did not increase in size until 5 yr. ago, when it began to increase slowly. Again the same physician advised leaving it alone. In July of this year, he noticed more rapid growth of the mass. Pain in the axilla began 5 yr. ago; this called his attention to a mass in the axilla, the size of a grape. He thought this to be a carbuncle and obtained relief with a salve, although the mass steadily increased in size. No bleeding from nipple since onset in 1921, until about September 5, when he received an accidental blow on the breast while taking a shower bath, and there was a sudden forceful spurt of blood from the nipple.

There is a swelling in the right axilla; no discoloration of the skin; mass is 11 cm. in diameter;



protrudes 7 cm. from duct wall; fluctuates under finger. Exuberant masses are partially cystic and partially firm. Mass freely movable; underlying tissue and skin is freely movable over the mass. The mass in the right axilla is stony hard, irregular, and slightly movable with arm at side, but fixed when arm is extended at shoulder. Left breast and axilla negative. Patient is a well-developed male with no evidence of loss of weight or cachexia.

Impression: Carcinoma of right breast with metastases to right axillary glands. Paget's disease of nipple. Blue dome cyst. Radical operation was performed, and the pathologist's report made the diagnosis—papillary carcinoma with metastasis to axilla.

*Dr. Bender.* "Aneurysm of Aortic Arch." P. S., male, aged 43, white, Austrian, bricklayer, was admitted August 31, with the following complaints: Headache, vertigo, pain over spinal column, projectile vomiting, constipation, ringing in the ears, partial deafness, impairment of vision of the left eye and occasional burning sensations. Onset 3 months ago, when patient became subject to suboccipital headaches, throbbing in character, more or less continuous, but varying in intensity. The pain radiates to the frontal region, and when very severe causes nausea and vomiting. The vomiting comes in spells and may occur even with an empty stomach. In the past week the vomiting has become more frequent. Headache is usually accompanied by pain in upper part of the vertebral column, dull in character and seeming to start at the lower spine and travel up to the suboccipital region. For about a week he had noticed ringing in the left ear; hearing in the same ear impaired; for the same period of time has had burning sensations and spots before the left eye. He has lost 35 lb. There is a generalized heaving pulsation over the entire chest anteriorly, synchronous with the heart beat; no friction rub, thrill or bruit present. Apex heart beat somewhat distant; sounds at base accentuated and heard over a large area; no murmurs; rhythm regular; area of cardiac dullness considerably increased to the left. Reflexes present and active. No ataxia, spasticity, flaccidity, anesthesia or paresthesia.

Fluoroscopic and radiographic examinations showed a non-pulsating aneurysm of the descending arch of the aorta; ascending aorta dilated; heart and mediastinum normal.

The patient was placed on specific treatment—iodides and mercury—and showed a rapid improvement of the cerebral symptoms, so that he was discharged 10 days after admission.

*Dr. S. Braunstein.* "Septic Endocarditis." M. H., male, white, aged 44, embroiderer, admitted September 4 with the chief complaints of pain in the left shoulder, burning and fulness of the stomach; vomiting and belching; chills and fever. Onset about June with pain in the left shoulder, at times very severe. About 4 weeks prior to admission, he started having chills and fever every night. Appetite became very poor and he lost 16 lb. in 13 weeks. Bowels regular, but has noticed white patches in the stool; no blood. Perspires a great deal. Tonsils cryptic but not enlarged. Teeth poor; many missing. Heart enlarged to the left; systolic murmur at the base and apex. Blood pressure 80/45. Râles at both lung bases posteriorly. Spleen palpable at the costal margin. Blood culture after 4 days showed 3 colonies resembling staphylococci; not taken as conclusive. Feces showed a strong reaction for blood. Icteric index 15.

The patient was in the hospital 6 days and

showed progressive asthenia with temperature ranging from normal to 105°. On the sixth day complained of severe knife-like pains over the abdomen and chest; pulse intermittent; he became comatose, and expired.

The diagnosis of septic endocarditis was made by Dr. Pearlstein and was verified at autopsy, when the heart was found markedly dilated and one flap of the aortic valve had numerous vegetations which had practically eroded the entire flap. The spleen showed infarction and splenitis. Liver showed congestion and cloudy swelling.

*Dr. I. Schwarzwald.* "Nephritis Simulating Polycystic Kidneys". F. B., female, white, aged 43, Italian, housewife, was admitted March 16, with the chief complaints of pain in epigastrium after meals, nausea and dyspnea. Onset 6 weeks prior to admission. The pain occurs after meals regardless of the kind of food; is gnawing in character, and does not radiate. Duration of pain is about 2-3 hr. Nausea is practically constant; no vomiting. Appetite is poor; patient afraid to eat because of the pains which follow. There is considerable belching and passage of flatus; no heartburn. No blood in stools. Pyelograms showed ptosis of both kidneys.

In the 2 weeks that the patient remained in the hospital, urine examinations showed a few changes; albumin varied from heavy trace to 3½% by volume. Discharged March 30 much improved; blood pressure at the time was 170/130.

She was readmitted on August 3 with practically the same complaints; had been fairly comfortable for about 2 months; then symptoms reappeared and have become progressively worse. Blood pressure 210/142. Moseenthal test done to find the ability of the kidneys to concentrate; amounts voided were small, 15-20 c.c.; Sp. gr., 1.016-1.026. It was felt that very little could be done, and after 3 days she was discharged, August 6, somewhat improved.

The patient was again readmitted on August 17, when in addition to her old symptoms she complained of swelling of the legs and ankles and inability to pass urine. In the 3 weeks that she remained in hospital, the course was progressively downgrade. Auricular fibrillation developed. In spite of digitalis and diuretics, the edema became worse. Several days before death, she became irrational and toxic, which was attributed to uremia. On the sixteenth of September, she developed a pericarditis, became comatose, and expired.

*Dr. Hickman* stated that the most constant clinical feature of polycystic kidney is progressive, insufficient renal action; it may occur at any age; the pyelogram, in a true case, is pathognomonic, with the characteristic spider-like appearance of the calyces.

## MERCER COUNTY

A. Dunbar Hutchinson, M.D., Reporter

The Mercer County Medical Society held a regular meeting in the Carteret Club, October 14, with President Swern in the chair. Scientific discussion was omitted, and business relative to welfare of the Society transacted.

Dr. A. James Fessler was elected an associate member.

Applications of Drs. Joseph Pantaleone, H. D. Cowlbeck, P. J. Finegan, J. R. Harman, C. L. Marotte and B. R. Wayan were read and referred to the Membership Committee.

The invitation to attend the Convention of the Eastern Homeopathic Association, to be held No-

vember 4-6 in the Stacy Trent Hotel, Trenton, was accepted.

The President will appoint a Committee to assist the Secretary in obtaining the information requested in a communication, received from Dr. R. G. Leland, of the A. M. A., relative to Medical Economics.

The financial situation in relation to medical care of those seeking professional advice, but without sufficient income to adequately compensate the physician or the hospital, was most thoroughly discussed; no definite action, however, was taken by the society, and remuneration for services rendered being left to the discretion of the individual physician.

The suggestion was made that a closer correlative association should be undertaken in the Social Service Departments, of the city and its hospitals, in order that generalized pauperization may be prevented.

The motion prevailed that the Annual Banquet be held in the Trenton Country Club, November 12, at 8.30 p. m.

### Third Judicial District Meeting

This meeting was arranged by the Councillor, Dr. Scammell. There were very few responses received in answer to the invitation to attend this meeting; about 350 cards sent out with not over 50 returns—what is the reason for so little attention being shown a return card?

Following a very informal introduction to Mr. Henry W. Jeffers, President of the Walker-Gordon Company, we were conducted to the rotolactor, where a very delectable luncheon was served.

A sociable hour was thus spent, after which we were invited to observe the process involved in the mechanical arrangement of the rotolactor.

Mr. Jeffers gave a very interesting account of the history of the Company from its inception.

WALKER-GORDON LABORATORY COMPANY, INC.

#### *An explanation by Mr. Jeffers*

The Walker-Gordon Laboratory Company was organized in 1891 for the purpose of establishing laboratories where milk could be modified for infant feeding. The first laboratory was opened December 1, 1891, at 203 Clarendon Street, Boston, Massachusetts, and marked the first attempt to prepare milk for infant feeding in accordance with a prescribed formula given by a physician.

Dr. Thomas Morgan Rotch, who was then Professor of Pediatrics in Harvard University Medical School, conceived the idea of prescription feeding, and with Mr. E. G. Gordon worked out a plan for organization of a company to carry on this work. The idea of prescription feeding was immediately accepted by the medical profession and demands were made for laboratories in many different cities.

For several years the principal function of the company was the modification of milk. However, it was soon apparent that to make satisfactory modified milk, it was necessary to have clean milk produced in a sanitary manner. The first producing plant was started in 1897, at Plainsboro, New Jersey, and it has since grown to be the largest Certified Milk plant in the world. At the time this farm was established very little was known regarding the essential methods in producing clean milk and for a number of years the Company devoted the major part of its energy to the development of methods of producing and handling milk so as to insure cleanliness and low bacteria count.

The demand for modified milk decreased and it became a common practice to modify milk for infant feeding in the home. With the increased demand for special milk for infant feeding, to be modified at home, came the organization of the first Medical Milk Commission and the establishment of a grade of milk known as "Certified". The laboratory modification of milk is today only a minor part of the Walker-Gordon business.

The Company owns and operates 3 producing farms at Charles River, Massachusetts, Plainsboro, New Jersey and Juliustown, New Jersey. In several cities other farms are licensed to produce milk under supervision of the Walker-Gordon Laboratory Company. The one at Plainsboro is probably the most interesting milk producing farm in the world. It has about 3500 acres of land, about 1400 cows milking, and 2800 animals including cows, calves, young stock and bulls.

Daily deliveries of Walker-Gordon Milk are made in more than 1000 towns and cities. Special shipments are made for ocean voyages of several weeks' duration. It is served in the dining cars of many of the largest railroads and in many of the best hotels and restaurants in our large cities.

At present the Company is working on a system for volume production of the highest quality milk on an industrial basis. The purpose of this plan is to produce by careful breeding and feeding a milk of maximum nutritional value, uniform in quality, as nearly absolutely clean as resources of science and care can make it, safeguarded in every way possible, and through volume production and by the use of industrial methods produce this milk at the lowest possible cost.

Dr. Hornsburger, connected with the Laboratory, then delivered a very instructive discourse on the many processes devised for the purpose of developing vitamin D, with particular emphasis laid upon its effect in reducing rachitic tendencies, and the cure of this most distressing condition in early childhood.

Dr. Hornsburger directed attention to an article by Dr. W. H. Eddy, in *Good Housekeeping*, of October, as follows:

Ever since the vitamin need was discovered, mothers have had to study new adjuncts to baby feeding. In addition to his lordship's milk properly modified and sterilized, there have been his orange juice to prepare, his cod-liver oil or viosterol to measure out and serve at proper intervals. All this preparation of adjuncts falls on mother and adds to her tasks and takes her time and attention.

It is especially gratifying then, to learn of an experiment that promises to lighten mother's tasks. An experiment that appears to have successfully taught the cow to make a better milk; a milk that need not be supplemented with these essentials to baby health because the cow herself has been taught to put the necessary vitamins C and D into her milk.

The story of how this has been accomplished at the Walker-Gordon farms, and how it can be duplicated by any milk producer who cares to follow the same régime, was one of the dramatic features of the meeting of the American Medical Association at Philadelphia last June.

Dr. Alfred Hess presented the story and told how tests on over a hundred babies had demonstrated that cows could be made to manufacture a milk so rich in vitamin D that when this milk was the sole diet of the babies no rickets developed. He called attention in his presentation of this story that up to now every advance in the knowledge of infant needs had demanded the coöperation



of the mother. This development had eliminated that demand.

The experiments which accomplished this modern miracle were carried out at the Research Laboratories of the Walker-Gordon farms at Plainsboro, New Jersey. It was already known that when foodstuffs which contain the precursor of vitamin D are irradiated with ultraviolet light they become endowed with antirachitic potency, and will cure and prevent rickets. This fact was discovered almost simultaneously by Dr. Steenbock, at the University of Wisconsin, and by Dr. Hess, but many foods so activated are unsuitable for infant use. With time it developed that yeast was unusually rich in the precursor of this rickets-preventing vitamin D. By separating this substance from yeast, irradiating it, and then dissolving the activated product in oils, such as peanut oil, there was evolved the product now known as viosterol, which then became a competitor with cod-liver oil as a baby source of this vitamin. The irradiation of yeast itself was another means of producing a good source of this vitamin, but such a product was more difficult to incorporate in baby's bottle.

It then occurred to the experimenters that if irradiated sources of vitamin D were fed to the cow, she might herself transfer the vitamin from her diet to her milk. There were certain experiences that suggested that this wasn't so crazy an idea as it might at first appear, for it was already demonstrated that the vitamin A content of milk is profoundly influenced by the amount of this factor in Bossy's diet.

The experiment was tried. Bossy was fed a wide range of these vitamin D rich foods. Viosterol itself was given. Irradiated yeast was made a part of her diet. I don't know just what influence the yeast manufacturers exerted on Bossy, but I understand that to date the use of irradiated yeast has been the most successful supplement in accomplishing the manufacture of milk of highest vitamin D potency. She used it more successfully to that end than viosterol. At any rate, with irradiated yeast as a supplement, a milk was forthcoming 20 to 30 times the usual winter potency of milk in that factor.

These feeding experiments took a lot of time. Dr. B. H. Thomas, of the Walker-Gordon Laboratory, secured the assistance of Professor Henry C. Sherman, of Columbia University, and the latter's associate, Dr. Florence MacLeod, in conducting animal tests on the milk samples. A single milk test is time consuming, requiring at least 30 days. When the assay was complete, following a given regimen, the result was often a report of failure, but eventually trial and error attained success, and the first part of the job was done.

But only the first part!

Would this milk, without further supplement, actually prevent rickets in babies? Could they take enough for this purpose in the routine daily feedings?

At this point coöperation of the pediatrician was necessary. Dr. Hess stepped into the picture. Last fall he located 102 babies less than a year old, of whom a considerable percentage had visible evidence of rickets. To these babies he supplied the new milk, and took charge of the examinations to determine its efficiency or lack of efficiency. Nurses called at the homes to see that instructions were carried out and to make sure that no supplements were used. At regular intervals these babies were x-rayed and other diagnostic tests recorded. A complete history was compiled on every case.

As the feedings and examinations progressed, it became evident that the miracle had been worked. Dr. Hess said at the American Medical Association Meeting: "The best prevention was obtained with the milk from cows which received the greater supplement of irradiated feed (yeast in this case). This milk not only prevented rickets, but was able to effect a cure in the cases in which a test of this kind was undertaken. In addition the infants thrived well and gained normally in weight."

Dr. John Hagerty, President of the State Society made a very pleasing reference to the prospective attainments of the society for the coming years.

Dr. G. N. J. Sommer, Past-President, expressed a most optimistic opinion for the success and achievement of the many high ideals placed before the society for attainment.

Dr. Frederic J. Quigley reserved his remarks, stating that he, perhaps, providing the usual course of events followed, might in the future be placed in a position to assist by direction, the maintaining of the standards of the society.

Following a motion by Dr. Hutchinson, that a rising vote of appreciation be extended Mr. Jeffers and his assistants for the very enjoyable hospitality shown the members, and to the Councilor for the Third District for his efficient conduct of the meeting, adjournment was in order.

## MIDDLESEX COUNTY

Samuel Gordon Berkow, M.D., Reporter

The Middlesex County Medical Society met October 21 at 9:00 p. m., at the Perth Amboy General Hospital, Dr. William H. McCormick presiding.

Dr. Wells P. Eagleton, of Newark, spoke on "Traumatism of the Frontal and Temporal Regions in Relation to Meningitis", and he stressed particularly the necessity of immediate treatment of compound fractures of the skull. He advocated excision of the skin edges, débridement, and immediate tight suture *without drainage*. In fracture of the frontal region, he emphasized the importance of fractures involving the frontal sinus, because there is great danger of meningitis for a long time, from invasion by germs of an ordinary "head cold". He also described the comparative anatomy of the olfactory, auditory and visual centers.

Applications for membership were received from L. S. Downs, Carteret; Albert E. Kovarsky, Perth Amboy; L. Sabin and H. C. Stillwell, of Milltown.

The Committee on Revision of the Constitution presented its report. Many changes were found necessary in order to modernize the Constitution; this being the first revision in 47 years. The first reading of the revised Constitution was approved by vote.

Attention was called to the fact that Dr. Robert L. McKiernan, Vice-President of the Society, is a candidate for the New Jersey House of Assembly. Upon motion, the secretary was instructed to circularize members of the society, urging them to exert their efforts in behalf of McKiernan's candidacy.

## Medical Section of Rutgers Club

John H. Rowland, M.D., Secretary

### October 7th Meeting

Members of the Medical Section of Rutgers Club were the guests of Mr. E. D. Mitchell, Superintendent of Forsgate Farms, Jamesburg, on October 7,

when they played golf on the beautiful and difficult course at the Forsgate Country Club, where there are more traps and pitfalls to the square inch than found in the Roaring Forties. A kicker's handicap tournament, held at the same time, was won by Drs. Whitehill and Nafey.

The members were escorted through the dairy by Mr. Mitchell, and at about 8 o'clock enjoyed a very satisfactory meal at the Forsgate Tea Room. About 20 members were present. The absentees regretted very much that they could not have been present to enjoy this wonderful afternoon and evening. Those present enjoyed a speech by Dr. McKiernan, who is a candidate for the Assembly, and who brought out the obligation that a doctor must necessarily feel toward the welfare of the state. He also pointed out the advantages of many things a physician in office might obtain for benefit of the health of the community, and the importance of the state deciding the question of prohibition. All those present were strong for Dr. McKiernan's election to the Assembly.

#### October 16th Meeting

The regular monthly meeting of the Medical Section of the Rutgers Club was held on Friday, October 16, 1931, at the Hotel Klein, with 23 members present. The meeting was called to order by Dr. F. C. Johnson, Chairman, at 9.00 p. m. The speaker of the evening, Dr. Thomas H. Russell, Associate Professor of Surgery at the Gouverneur Hospital, New York, was immediately introduced, and spoke upon the "Differential Diagnosis and Treatment of Surgical Diseases of the Upper Abdomen".

Dr. Russell presented in a very concise manner some of the essential points, stressing particularly the importance of a thorough and complete history. He pointed out the necessity for making a complete physical examination in order to establish a working diagnosis before seeking laboratory aids.

The subject was freely discussed by the members present.

After the meeting, members were entertained at dinner by the entertainment committee—Drs. Rothschild, Runyon, Rowland and Scott.

#### MONMOUTH COUNTY

William Von Oechsen, M.D., Reporter

The regular meeting of the Monmouth County Medical Society was held at the Berkeley-Carteret Hotel, Asbury Park, on Wednesday, October 28, at 8.30 p. m., with Dr. William K. Campbell presiding. Minutes of the 2 previous meetings were read and approved. Communications were read and ordered filed.

Dr. Fisher read an offer from the superintendent of the Allenwood Sanatorium to entertain the society at a dinner, at any time it might designate. Drs. Fairbanks and Altschul were appointed as a committee to arrange for the November meeting to be held at the Sanatorium, preferably on the Sunday following Thanksgiving Day. Dr. William F. Jamison submitted an offer from the Jamesburg Home, to entertain the society. It was decided to let that rest for the present but to take advantage of the invitation at some future date.

Dr. Stanley Nichols read a communication from

the Monmouth County League for Social Service regarding the treatment "state wards" by local physicians. A fee schedule of \$1.50 for an office and \$2 for a house call, plus mileage, was recommended. After discussion of the matter, it was laid over, with the request that Dr. Nichols secure further information as to the mileage allowed.

Dr. D. F. Featherston moved that the Monmouth County Medical Society go on record as considering it unethical for physicians to purchase space in the classified section of the New Jersey Telephone Directory listing anything but a specialty, and that the listing of the doctors' names in any other publication be dealt with by application to the County Society. The motion was seconded. Dr. E. Stewart amended this motion to include a statement of office hours. The amended motion was carried.

The President appointed Drs. MacKenzie and Wilson to inquire into the maternity and infant mortality rate in Monmouth County, and to report at the next meeting.

A letter was read from Dr. Nicholas Ransohoff, of New York, in which he expressed the desire to be enrolled as an associate member of our society. It was decided that Dr. Ransohoff be forwarded an application blank for full membership.

The names of Drs. Allen, Baker, and Boyd were presented for membership and referred to the Board of Censors.

After the motion for adjournment a buffet luncheon was served.

#### PASSAIC COUNTY

W. W. Hall, M.D., Reporter

The regular meeting of the Passaic County Medical Society was held at the Health Center, Paterson, at 9 p. m. on Thursday, October 8. The meeting was called to order by the President, Dr. John Carlisle. The minutes of the September meeting were approved as read.

The Treasurer, Dr. Taber, presented his Annual Report, which was approved as read.

The Scientific Program consisted of a most instructive and interesting paper entitled "Certain Difficulties Encountered in Operations upon the Common Bile-Duct". It was presented by Dr. Henry V. Cave, Associate Attending Surgeon to Roosevelt Hospital, New York City. The lecture was illustrated by lantern slides, and was discussed by Drs. H. H. Cooke, T. A. Dingman, M. Joseph, A. Schulman, and W. Spickers.

The Nominating Committee, consisting of Drs. J. P. Morrill, Chairman; O. R. Hagen, and J. N. Ryan, presented the following candidates for the coming year:

President, Jacob Roemer, Paterson; First Vice-President, Joseph V. Bergin; Second Vice-President, Harry Williard; Treasurer, Leslie R. Taber; Secretary, Wayne W. Hall; Member of State Nominating Committee, H. H. Lucas; Delegates to the State Society, Carlisle, Lucas, McCoy, Spickers, Tuers, and Yates.

All were elected unanimously.

Dr. Carlisle presented the President-Elect, Dr. Jacob Roemer, who, in his Annual Address, urged the members present to continue the good attendance the society has had in the past.

Dr. M. Joseph moved, and it was carried, that the officers be thanked for the splendid meetings of the past year.

There were 69 members present.

Adjournment was followed by a collation.



**SALEM COUNTY**

William H. James, M.D., Reporter

The Salem County Medical Society met at the Memorial Hospital in Salem on October 14, at 2 p. m. The meeting was called to order by President Perry, of Woodstown.

This being the Annual Meeting, the following officers were elected: President, L. C. Hummel, Salem; Vice-President, William T. Hilliard, Salem; Secretary and Treasurer, David W. Green, Salem; Reporter, William H. James, Pennsville.

After the regular business was completed, Dr. Haskell, of Jefferson Medical College, gave a most interesting talk on "The More Common Rectal Diseases and Their Treatment". The speaker said that many serious rectal diseases were neglected as to treatment just because there was not a thorough examination made. Pain and hemorrhage were always suspicious symptoms, not only of hemorrhoids but of malignant disease as well.

Dr. I. W. Knight, of the State Board of Health for South Jersey, gave a very interesting account of the epidemic of poliomyelitis existing in some South Jersey counties. While there have been a few deaths, most of the cases have been of a mild form.

The following new members were elected: John S. Dunn, Salem; C. B. Mockes, Woodstown; Edward R. Prigger, Pennsgrove.

The next meeting will be held December 9, at the hospital in Salem.

**SOMERSET COUNTY**

J. L. Young, M.D., Reporter

The Somerset County Medical Society held its annual meeting October 8, at the Hotel Deauville, Somerville. President E. G. Brittain called the society to order, and the minutes of the preceding meeting were read by the secretary and approved. Treasurer's report was read and approved.

The applications for membership, of Drs. Crawford, of Bedminster, and J. Gordon Ross, of Basking Ridge, were read. Motion made and carried that these be referred to the Board of Censors for consideration.

Dr. Frank Fields spoke of movement being made in Somerset, Warren, Hunterdon and Sussex Counties to have a sanatorium for tuberculous patients constructed, and he wanted to know what the members thought of it. Also, Mr. Frank Remsen, Chairman of the Board of Freeholders, met with the society, and told of the action that the Freeholders had taken in this matter.

Motion was made by Dr. Lawton, that the Somerset County Medical Society go on record as being in favor of the sanatorium.

Dr. Ely made a motion, which was seconded and carried, that the attorney for collection of delinquent bills be requested to make quarterly reports to physicians.

Motion was made by Dr. Lawton that the matter of non-medical men prescribing be taken up by the State Medical Board.

Dr. A. L. Stillwell read the report of the Nominating Committee, for officers of society: J. Meigh, President; T. H. Flynn, Vice-President; N. T. Crane, Secretary; Lancelot Ely, Custodian; Hege-man, Treasurer; J. L. Young, Reporter; Delegates, Drs. Renner, Cooper and Lawton. Motion made and approved that secretary cast ballot of society, and all were elected.

The society had as guests, Drs. Day, Gardner, and Neal of the Veterans' Bureau Hospital.

During dinner State Senator Dryden Kuser made an interesting talk. Spoke of legislation pertaining to dispensing of drugs, stream pollution and osteopathy. Stated that he welcomed advice of medical profession in these matters.

**UNION COUNTY**

Russell A. Shirrefs, M.D., Reporter.

The Annual Meeting of the society, held at the Elizabeth General Hospital on the evening of October 28, was largely attended. A welcome guest was Dr. R. H. Van Ness, of Newark, who accompanied his wife, the President of the Woman's Auxiliary to the State Society, and addressed the members of the local auxiliary, meeting in another room. The new Constitution and By-Laws was read and adopted. Nine candidates were proposed for membership, action to be taken at the next meeting, and the following were elected and enrolled: Drs. Claude P. Fordyce, Westfield; Alan J. Maged, Elizabeth; G. H. Jackson, Union; Arthur D. Seybold, Plainfield; F. Cleveland Davis and Arthur Ackerman, Summit.

The essayist of the evening was Dr. M. Vinciguerra, the retiring President, who chose for his topic—"Delinquency and Crime". He discussed the medical and sociologic aspects of insanity, feeble-mindedness and antisocial behavior. (The paper will be submitted to the Journal for publication.)

These officers were elected for the ensuing year: President, H. H. V. Hubbard, Plainfield; Vice-President, Emil Stein, Elizabeth; Secretary, George W. H. Horre, Elizabeth; Treasurer, Alden Hoover, Elizabeth; Reporter, Russell A. Shirrefs, Elizabeth. Censors: Norton L. Wilson, Elizabeth; George Orton, Rahway; Chas. H. Schlichter, Elizabeth; N. W. Currie, Plainfield; and Thomas P. Prout, Summit. Board of Trustees: James S. Green, Elizabeth; Edward S. Krans, Plainfield; J. B. Harrison, Westfield. Committee on Scientific and Literary Work: Elmer P. Weigel, Plainfield; Harry Block, Elizabeth; F. B. Sell, Rahway. State Society Nominating Committee: George T. Banker, Elizabeth. Committee on Public Health and Legislation: George S. Laird, Westfield; George W. Strickland, Roselle; W. B. Morris, Springfield; George T. Banker, Elizabeth; H. D. Corbusier, Plainfield.

The comforting report of the Treasurer showed so much money on hand that the annual dues will remain at \$15 all of which goes to the State Society. Verily, prosperity is not "right around the corner" but actually shaking hands with us now. Cheerio! Finally, there were lots of good things to eat.

**Summit Medical Society****September Meeting**

William J. Lamson, M.D., Secretary

The regular monthly meeting of the Summit Medical Society was held at Wallace Pines on September 29, at 8:30 p. m., with President Campbell in the chair and Dr. Allis entertaining. There were 19 members and 2 guests present. Minutes of the last meeting were read and approved.

The paper of the evening was read by Dr. Allis, on the "Treatment of Gonorrhea". He mentioned the preventive methods, and recalled the good results obtained in the war from personal prophyl-

axis and inspections. Much can be done in the abortive treatment of gonorrhea if a careful technic is followed, with constant checking up, step by step, by means of the microscope. It is unwise for the general practitioner to treat such cases unless he is prepared to give time and attention to these details. In women, this abortive treatment is only possible when the urethra alone is involved.

Dr. Allis prefers protargol for the injections. The gonococcus should disappear in about 48 hours. He obtains 65% of cures.

The paper was a clear presentation of the subject, and of interest to all.

Dr. Krauss suggested that it would add to the value of future meetings if essayists requested in advance some member or members to study the proposed subject and be prepared to open the discussion somewhat more formally than is done at present.

The meeting then adjourned, after which refreshments were served.

### October Meeting

W. J. Lamson, M.D., Secretary

The regular monthly meeting of the Summit Medical Society was held at Wallace Pines, on Tuesday, October 27, at 8.30 p. m., with the President, Dr. Campbell, in the chair and also host of the evening. Present, 21 members and 8 guests. Minutes were read and approved.

Dr. B. B. Ranson, of Maplewood, read a paper on "The Newer Anesthesias", describing the work being done in the Orange Memorial Hospital with anesthetics other than ether or chloroform. Ethylene gas is explosive, hence the air of the operating room must contain sufficient moisture, and the operating table and operators must be properly grounded to prevent danger. Otherwise, it is safe for the patient and can be used despite acute chronic pulmonary complications.

Spinal anesthesia is especially satisfactory in abdominal surgery. Its use in surgery above the diaphragm is not recommended, although some get good results. The after-effects are negligible. It is not necessary to take blood pressure readings during the operation, as a fall in pressure is easily managed. Neocain is preferred. Failures in spinal anesthesia are due to faulty technic. Avertin rates high in safety, and is one of the greatest recent boons to the surgeon. The psychic shock is reduced to a minimum. Sodium amytal, given intravenously, has proved very satisfactory as induction anesthesia, either alone in minor surgical procedures, or supplemented by spinal or gas-oxygen anesthesia. The preliminary use of a barbitol group hypnotic (luminal), and a hypodermic of morphin still further adds to its efficiency.

Dr. Benedict, Anesthetist of the Orange Memorial Hospital, opened the discussion. He said that too vigorous catharsis preceding an operation is undesirable on account of dehydration. The preliminary use of glucose will prevent acidosis. The newer anesthetics, in skilful hands, are proving very useful.

The discussion of the paper was general, and showed great interest in the subject.

### Westfield Medical Society

Frederick Adrian Kinch, M.D., Reporter

The annual meeting of this society was held at the home of Dr. Joseph B. Harrison, October 13. A full representation of the membership was pres-

ent. The following officers were elected for the ensuing year: President, Milton E. Lowell; Vice-President, Lindley H. Leggett, Jr.; Secretary and Treasurer, Lorimer Armstrong; Comptroller, Charles T. Decker.

The paper of the evening, on "Poliomyelitis", was read by Dr. Frederick A. Kinch, making particular mention of the post-febrile treatment of the disease, recommending long periods of rest, quieting of pain, relieving deformity, massage and motion, passive or active, under supervision.

Very general and animated discussion followed the reading of the paper.

After the usual business of the evening was transacted, Dr. Harrison entertained the members of the society and its guests, Drs. Fiske Wood and E. Milton Staub.

After refreshments and a social hour, a vote of appreciation for his hospitality was extended to Dr. Harrison, and adjournment followed.

## Obituaries

DOWLING, Charles E., of 315 Park Avenue, Orange, died October 27, 1931, in Orange Memorial Hospital, after an illness of 3 weeks' duration.

Born in Mt. Pocono, Pa., 62 years ago, he attended private schools in Pennsylvania and was graduated from Jefferson Medical College, Philadelphia, in 1896. He started practice near Newton, in 1897, and went to Orange in 1905, where he since had specialized in diseases of the stomach.

Dr. Dowling was a member of First Church of Orange (Presbyterian), Union Lodge, F. and A. M. of Orange; Orange Chapter, R. A. M.; Kane Council, R. and S. M.; Jersey Commandery, Knights Templar, and the Essex County Medical Society.

He leaves his wife, a daughter, Miss Leila Dowling, of Orange; a son, J. Carl Dowling, of East Orange, and 2 grandchildren.

FRAZER, Thompson, of Newark, died October 9, 1931, following a recent apoplectic stroke.

Dr. Frazer was a graduate of Princeton University, class of 1897, and the New York College of Physicians and Surgeons. Dr. Frazer also was a pianist, having studied in Vienna under Leschetizky.

In the World War he held the rank of major and was medical commanding officer at Fort Bayard, N. M. A year ago he opened an office in Newark.

Dr. Frazer was born in Buffalo, September 10, 1877. He was a son of the late Rev. Dr. David R. Frazer, who for many years was pastor of the First Presbyterian Church of Newark.

PACZKOWSKI, Thaddeus, of 194 Broad Street, Bloomfield, died at his home on Thursday, October 15, 1931, after an illness of several weeks' duration.

Dr. Paczkowski was born in Germany 62 years ago, and was educated in the universities of Leipzig and Munich. He was the son of the late Dr. Stanislaus Paczkowski and was an artist and musician in addition to holding high rank in his medical profession. He returned to Europe for 6 months a year ago, for research work. Dr. Paczkowski practiced in Bloomfield for 23 years. He was known and highly praised for his work among the poor and in the Polish section of the town.



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



Under the Direction  
of the Committee on Publication

Vol. XXVIII., No. 12 ORANGE, N. J., DECEMBER, 1931

Subscription, \$3.00 per Year  
Single Copies, 30 Cents

## A CASE OF PSEUDO-HERMAPHRODITISM

JOHN F. HAGERTY, M.D.,  
Newark, N. J.

Cases of this kind are recorded rather frequently in the literature and usually refer to developmental defects of the internal genitalia. Either there is an hypertrophied clitoris and hernia of the ovaries into the labia majora, the labia often being adherent in the midline, and uterus and vagina are rudimentary; or, the testicles may be undescended, hypospadias present, the urethra opening into the remains of the urogenital sinus or cloaca, which may be large enough to assume the function of the vagina in copulation, and the scrotum is imperfectly developed.

It is doubtful whether true hermaphroditism has ever been seen, and by that is meant a person possessing all of the sexual organs of both sexes. The case to be reported, at first seemed to answer all of the requirements of true hermaphroditism, i. e., the finding of well developed uterus, tubes and ovaries, in a healthy male subject showing none of the secondary characteristics of the female. But, subsequent examination showed that what were thought to be ovaries were testicles, and supposed fallopian tubes were vasa deferentia.

A. S., 23 years old, a healthy looking man, born in the United States, of Italian parents, a barber, with a history of a normal childhood and youth, consulted me because of a large swelling in the right side of the scrotum which was uncomfortable and annoying. Examina-

tion showed this to be an indirect irreducible hernia. The scrotum could be emptied by taxis, but would immediately refill. Operation was advised.

At operation, July 7, 1931, on opening the hernial sac, a mass was found adherent throughout to the sac which proved to be a uterus, tubes, and presumably, ovaries. It was an unusual experience and, after some deliberation, a pan-hysterectomy was done, cutting through the broad ligaments on each side, which were spread out over the interior of the sac. A long, tubular canal, which enclosed the cervix, could be traced down to the bottom of the pelvis—undoubtedly vagina. The broad ligament stumps were turned over the roof of the vagina, and all sutured together and to the margins of the internal ring. The wound was further closed without drainage and the patient made a satisfactory recovery and has since remained well.

The specimen was a uterus  $2\frac{1}{2}$  in. across at the fundus, and 3 in. in length; apparently well developed fallopian tubes and 2 olive shaped bodies, thought at first to be ovaries, but later found to be testes. The uterine cavity would admit easily a curved artery forceps, and the tubes seemed patent. The round ligaments were plainly seen and the uterine arteries were of good size.

Pathologic report by Dr. John W. Gray: "The uterus is lined by epithelium-like structures. The glands are not well developed but the stroma is characteristic. The wall is composed of smooth muscle and loose fibrous connective tissue. The bodies which were thought to be ovaries are composed of typical testicular structures. The tubes connected with

these, and ending blindly posterior to the uterus, are composed of epithelial lining and surrounding muscle tissue layers characteristic of vas deferens."

The patient was large, fair-skinned, had been shaving for 3 years, wore a slight mustache, spoke with a male voice, and had no enlarged breasts; the figure was of the male type, large penis and scrotum, but no testicles, and he had felt, and been regarded by his family, as a healthy male.

Kwartin and Hyams<sup>1</sup> say that various authors maintain that true hermaphroditism does not exist in man or mammals, although recognizing its occurrence in plants and lower vertebrates. Among earlier authors, Ahlfeld defined a true hermaphrodite as one who could fecundate another and also be impregnated—produce a progeny of its own—but this definition is regarded by others as purely theoretic and an ideal conception. Munze demands that no human being should be considered as belonging to either sex before proving his or her ability by fatherhood or motherhood, but we consider a cryptorchic as male in spite of the fact that he does not produce spermatozoa.

Walton Martin<sup>2</sup> says: At one time in all cases development of the urogenital organs is in an indifferent, bisexual or hermaphroditic stage. The genital ridge from which the testicle or ovary is formed, the Wolffian body, Wolffian ducts and the right and left Müllerian ducts are seen. Later, in the female type, the ovary has developed from the genital ridge, the Wolffian bodies and ducts have disappeared, the ducts of Müller have made the uterus, tubes and vagina; while, in the male, the testicles have developed from the genital ridge, the Wolffian ducts forming the vas, and the Müllerian ducts disappearing. The secondary sex characteristics—mammary glands, change of voice, sex behavior—are dependent on the internal secretions of the reproductive glands. There are wide variations in the potency of the hormones of these glands; some maintaining that the endocrine glands have much to do with sex characteristics.

Masson<sup>3</sup> reports a case of true hermaphroditism. The patient, 40 years of age, always

regarded as a male, served as driver of a motor truck in the British army, had many secondary characteristics of the female; had spontaneous hemorrhage from the urethra every 3-4 weeks, lasting 3-4 days, for 10 years, with left lower abdominal pain. He had no testes in the scrotum. Operation showed a uterus, both tubes and ovaries and testicular tissue to the outer sides of the ovaries, with spermatozoa in the ducts. Both horns of the uterus were dilated with menstrual blood.

Jeffrey<sup>4</sup> reports a case very similar to our own—a bicornate uterus and what were thought to be ovaries but later found to be testicles in the hernial sac.

Bell says the term hermaphrodite should be applied to any individual in whom the sex is doubtful. British authors, following the lead of Lawson Tait, advise that hermaphrodites should be brought up as males.

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#### OUR COUNTY\*

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Of the 21 Annual Meetings of the Essex County Medical Society which I have attended, this is the first at which I have been the corpse. Naturally, during a presidential term, one gives much thought to this final task. One decides on a subject, rejects it, starts again and seems to go about in circles. The early presidents, who chose a scientific subject, had a definite advantage in this respect.

It seems to be obvious that sooner or later the mass of the medical profession will rise

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\* (Presidential Address to the Essex County Medical Society, Newark, October 8, 1931.)



in its wrath against those of our leaders who keep writing articles of criticism, which act as a basis for the countless papers appearing in the lay press and popular magazines, telling what is wrong with the practice of medicine. There is nothing wrong with the profession! It still deserves the wonderful words of Stevenson, who wrote: "The physician is the flower (such as it is) of our civilization; and when that stage of man is done with and only to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has, such as is possible to those that practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are more important, Herculean cheerfulness and courage, so that he brings air and cheer into the sick room, and often enough, though not so often as he wishes, brings healing."

Naturally enough, every president would like to be a "best seller", and it would be easy enough to sit down and write on national and international tendencies in medicine. Alas, how little we accomplish; a series of well remembered platitudes, a resolution, and then we revert to type for, thank fortune, we are practitioners of medicine first, last, and all the time. I propose to stick to local problems, old-fashioned though it may be. In my opinion, a little old-fashioned religion, old-fashioned economics, and old-fashioned medical organization thought, may not be amiss in these troublesome times.

It would seem that branch sections of the County Medical Society must be formed. Such sections are in existence and work well in other crowded districts. For many years the Newark group has loyally striven to interest the suburbs. The interest lasts throughout the term of the suburban member in office, and then slumbers again. Life has become too complex, traffic and parking problems mitigate against it more and more, as time goes on. It seems to me, we may well consider organizing such branches, or, better still, if the now existing societies, such as the Orange Mountain Medical Society and the Associated Physicians of Montclair, were willing

to give up their restrictive elective privileges, their presidents might be made vice-presidents of the Essex County Medical Society and be taken over intact. The worst enemies of medicine today are not our critics but our own indifferent members. If our brand of the practice of medicine were not correct it would long since have perished. The history of medicine teaches us, over and over again, that while we have erred occasionally we have been right a tremendous proportion of times in our advances, whether individual or collective, and, as the foundation of organized medicine is the County Society, we must bend every effort to bring into active participation all the members of the profession, wherever they may be, and by any means we can contrive: Unity must be our watchword. I realize that this plan would be a real sacrifice for the existing societies, but with golf, the radio, and the thousand other distractions of life, the sociable background of scientific medicine is on the wane, and it may be that economic study, as an organization problem, can replace the old, colorful, get-together meetings where everyone knew everyone else and did not hesitate to speak out in meeting.

In the course of years, the control of nurses has slipped from us, the direction of social service departments is no longer our privilege, and management of the policies of hospitals is rapidly passing entirely into the hands of laymen. When community chests came into existence, personal charity no longer swayed people and a civic consciousness arose. From the community chest to the tax rate is but a step. It behooves us to be ready to do our job. If we, whose joy it is to work in hospitals, cannot properly manage them, who can? For many years the doctor himself has encouraged the opinion that doctors are poor business men. Surely, in this depression, we have shown up not worse but rather better than the average business man, and now our opportunity is at hand. We must work hard to effect a condition in which at least one-fourth of the members of every hospital board of trustees shall be medical men. We must strive to have these men about 10 years apart in age groups, so that succession can be accomplished, and in order that the younger men

may be trained over a period of years in policies, in management, in contacts with the sources from which come the funds for treating the indigent sick.

It should be the problem of those men who are already on hospital boards to gradually bring more medical men into them, and it should be a pleasure to know that when the time comes for their own retirement an organization is already in existence to carry on the slogan "Medical Men for Medical Problems". In Europe, and in South and Central American countries, medical men are outstanding in their control of world problems. Are not we as able as they?

We are living in a new era. The world is organized on an international basis and can no more go back to individual self-sustenance, than it can take itself off a motor basis and go back to horses and oxen. Among young people will not be found any considerable degree of resignation to a life of hard labor with meagre returns. A nun recently said to me—"Doctor, we cannot get the young nuns to do what we used to do." Nor need young doctors do what we used to do; their education taking longer and being more expensive than of old, and their needs greater.

We are undoubtedly in a new type of civilization and culture. Originally, hospitals and clinics were organized by doctors for doctors as a place for taking care of the sick. Today, we are often asked to work for nothing, in clinics managed entirely by a paid staff, and where we are the only unpaid workers. Not unnaturally, there is sometimes a rebellious reaction to such a situation. Medical men are today, as they have always been, eager to care for the indigent sick, and the public knows and appreciates this full well, and does not hesitate to call on us. Sometimes, it seems as though the social agencies forget the background of present tendencies in the practice of the healing art. We must cultivate an awareness of the larger movements in the business and social world with which medical practice is becoming more and more closely allied. There are in our county many welfare agencies, such as the Essex County Health

Council, the Essex County Tuberculosis League, and even the insurance companies, and in no instance has the medical point of view been presented to such agencies without their appreciating at once its helpfulness and responding by a revision of their plans in order to coöperate with us. We must continue to flirt with those agencies in order to help guide them, or to convince them if and when we are right and they are wrong.

It has always been the thought of organized medicine that nothing else is so gratifying, both financially and in the satisfaction of a work well done, as private practice. Times are changing, it is a progressive age, but unless there is a marked change in mass psychology private practice will prevail until the Russian system is shown to be a success. There will be specialists in industry and in traumatic surgery as there are specialists in other fields. Let us encourage these doctors to practice on an ethical basis; let us help them get adequate fees from carriers and from lawyers following accident verdicts; let us emphasize the willingness of the ethics committee to help solve their problems. It is our bounden duty to do this sort of planning. A flying start has been made by the Medical Education and Hospitals Committee under the chairmanship of Dr. Eagleton. They have defined "case lifting" and declared it definitely unethical.

"Medicine today is not only a learned profession, it is an international movement. It includes child clinics, medical inspection in schools, safety in industry, and health teaching by insurance associations. It has reduced the death rate and lengthened the span of human life. Let us do our share to help this vista reach forth to its proper perspective."

We must continue to do our part in the education of the man in practice. This also may not be individualistic. There is a trend in the various legislatures to demand more from us. We can combat this only by producing proof that a large mass of practitioners is taking courses in the basic principles as well as in the new advances. We must have



organized courses, well attended, in order to show that the profession is taking care of this problem and to demonstrate that it is not a matter for legislative action. The degree to which medicine will occupy its proper place in modern society depends upon professional leadership, and the extent to which the rank and file of the profession are able to keep abreast of medical knowledge. The leaders must organize courses and the rank and file must coöperate by continuing to take them.

As a summary, I would state: Our major problem is within the county. As Coolidge says, we are a republic rather than a democracy. The State Society is going along very well, run by men who have the true interests of the profession at heart, and if at times our vote does not seem to carry as much weight as we would like, we must realize that while we have the largest unit in the state, we are easily out-voted by the other counties. If their wishes or points of view differ from ours we must be helpful in carrying out the major policies as passed by the majority; at the same time, continuing to carry on our own efforts to show our neighbors the logic of our ideas.

We are very lucky in Essex, in so far as we have no competition from large medical units, be they schools or foundations or hospitals, which attempt to carry on private practice. We must continue to simplify the health examination to its utmost proportions, teaching the public that while people must be made health conscious there is danger of becoming disease conscious. A thorough examination by a good general practitioner, with a search for the causes of illness in middle age and beyond, and a urine and blood examination, with x-ray examination if indicated, is the solution of their problem; and not an examination with a wealth of minutiae by a huge, impersonal, health center.

I cannot finish without expressing my appreciation of the honor of having been your President and my joy at remaining on your Council as an Ex-President. When one is in earnest, it is a nervous year. Things do turn up—they have—and the solving of problems is not always easy. The coöperation of the officers and the Council, the helpfulness

of the committees, and the loyalty of the members is a boon to one's soul. Dr. Kraker and Dr. Haussling were particularly helpful. When Essex has preferment to bestow, it may well remember Dr. Kraker locally, and Dr. Haussling for advancement in the State Society. I would ask you to study the parable of the good Samaritan, and remember always that your neighbor is your fellow practitioner in your county, and that your major responsibilities are to him and to the citizens, sick or well, of your own community.

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### CARDIAC IRREGULARITIES AND THEIR CLINICAL RECOGNITION\*

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The number of patients coming into an active cardiac clinic, having some one or another type of arrhythmia which has been misdiagnosed, makes me feel that a paper on this subject, even though offering nothing new, may be of interest. Proper diagnosis of the different arrhythmias is of great importance. Failure to diagnose some irregularity of serious import may prevent the timely institution of treatment that would prove life saving. Of equal importance, perhaps, is failure to recognize the minor importance of certain irregularities, with the result that the patient is caused economic loss, through unnecessary restriction, and is possibly well started on the way to distinct cardiophobia.

The development of instruments of precision like the polygraph and, especially, the electrocardiograph, makes the correct diagnosis of cardiac irregularities a simple matter where such aids to diagnosis are available, but frequently they are not available and usually they are not necessary. Certainly 80% to 90% of all the irregularities of rhythm which we are called upon to diagnose should be cor-

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\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, Asbury Park, June 4, 1931.)

rectly diagnosed with the aid of a stethoscope alone.

It is well to consider the probable frequency of the various types of irregularities. Lewis gives the relative frequency of the different disorders of the heart beat in general hospital practice as follows: Auricular fibrillation, 40%; premature contractions, 35%; alternation of the heart, 10%; paroxysmal tachycardia, sinus arrhythmia, heart block and flutter, 15%. He further states that "dealing with those in whom there is obvious cardiac failure, at least 60% of irregular hearts are irregular because the auricles are fibrillating".

I looked up the records of the last 300 cardiac cases treated in the Atlantic City Hospital and found that some form of irregularity was noted, at some time, in 114, or 38%. In these 114 cases the incidence of the various types of irregularity was as follows: Auricular fibrillation, 53 cases, 46.5%; premature contractions, 21, 18.4%; sinus arrhythmia, 9, 7.9%; auricular flutter, 4, 3.5%; paroxysmal auricular tachycardia, 1, 0.8%; complete heart block, 1, 0.8%; pulsus alternans, 1, 0.8%; type arrhythmia not noted, 24, 21%.

Of 92 cases in the Cardiac Clinic of the Atlantic City Hospital there were 39, or 42%, which showed some type of irregularity, and these cases were divided as follows: Premature contractions, 21, 53.8%; sinus arrhythmias, 11, 28.2%; auricular fibrillation, 5, 12.8%; complete heart block, 1, 2.56%; pulsus alternans, 1, 2.56%.

Of course, statistics are not of great value in such a small series of cases, but it is interesting to note that our percentage of cases of auricular fibrillation in the Atlantic City Hospital is 46.5%—greater than the figures Lewis gives, while in the Clinic where all the patients were ambulatory the percentage of auricular fibrillation drops to 12.8%.

Before taking up the various types of irregularity, it may be well to recall briefly the pathway of the excitation wave in the heart. The normal cardiac impulse originates in a bundle of specialized muscle tissue lying in the right auricular wall at the junction of the superior vena cava and the auricle. This bundle of specialized tissue, called the sino-

auricular node, or node of Kieth and Flack, is about  $\frac{1}{2}$  in. long and is enervated by both the pneumogastric and sympathetic nerves. The right pneumogastric is supposed to exert more influence on the rate of the heart, and the left pneumogastric more influence on the rhythm, although neither is concerned solely with only one phase of heart control.

From the sino-auricular node the excitation wave spreads over the right auricular wall to the left auricle in a series of concentric rings, and arrives at the junctional tissue through which it is transmitted to the intraventricular distributing system. The junctional tissue, so-called, consists of a specialized neuromuscular bundle about  $\frac{3}{4}$  in. long, starting in the right auricle near the coronary sinus and proceeding forward and downward to the membranous septum of the ventricle. This bundle has been artificially divided into 3 parts—the node of Tawara, the bundle of His, and the bifurcation of the bundle. To avoid confusion in nomenclature, the whole bundle is now generally spoken of as the atrioventricular node, or simply the A-V node. The A-V node divides into 2 branches, and the right branch continues directly to the right ventricle, while the left branch pierces the interventricular septum to reach the left ventricle. These main branches divide and subdivide until the multiple divisions end in the fibers of Purkinje. The distribution of these fibers is so nearly uniform in each ventricle that in the normal heart the chambers are activated at the same time and the ventricles contract simultaneously. A period of rest follows (ventricular diastole) and the cardiac cycle is completed. A new impulse then starts in the sino-auricular node, proceeds along the same pathway, causing auricular contraction, then ventricular contraction, then rest, and thus the phenomena of rhythmically repeated heart-beat is carried on. Keeping the anatomy and physiology of this conducting system in mind, we can proceed to a consideration of various types of arrhythmias.

Sinus arrhythmia is usually an irregularity of childhood and adolescence. It is relatively infrequent after the age of 20. The type most usually encountered is that in which there is an acceleration of the heart rate with inspira-



tion and a slowing during expiration. Of the types not associated with respiration, Lewis describes 4; (1) Sudden and prolonged cessation of the whole heart beat, usually associated with syncope. (2) Relatively abrupt slowing of the heart rate to from 20-40 beats per minute, associated with lowering of the blood pressure. This type of sinus irregularity was frequently met with in cases of effort syndrome among soldiers and was frequently responsible for faintness or actual loss of consciousness. (3) Phasic variations of heart rate in which retardation and then gradual acceleration of the whole heart occurs. The change may spread over 10-15 or more seconds, and may occur regularly or irregularly. It is a rare form. (4) An irregularity of the whole heart in which shorter or longer pauses are mingled indiscriminately. This last type and the respiratory type are the types of sinus arrhythmia most frequently encountered. In the respiratory type, deep breathing will tend to emphasize the irregularity. The other types are accentuated during the rest following exercise. They are all abolished by any factor that increases cardiac rate. They will disappear with exercise, fever, or emotional states that increase heart rate. These types of irregularity may occur to hearts in which no evidence of disease can be discovered and are of little consequence except those that cause syncope. "They may be considered as evidences of normal, tonic, inhibitory, nerve action and their only possible importance lies in their possible confusion with other types of arrhythmias." (Lewis.)

Heart block is that condition in which there is delay in or failure of the ventricle to respond to an impulse coming to it from the auricle. It may occur in any age group and has been observed even in the new-born. This condition may vary from delayed A-V conduction time to complete dissociation of auricles and ventricles. In the earliest form of heart block, delayed A-V conduction, it is usually impossible to make the diagnosis without the aid of some instrument of precision—today, usually the electrocardiograph. In some few cases, however, where the delay is sufficiently long, the condition may be suspected if one listens carefully. When normal mechan-

ism exists the sound produced by auricular systole is usually inaudible. When the separation between auricular and ventricular systole is sufficiently prolonged, the auricular sound may become audible and produce a split first sound or a reduplicated second sound. In mitral stenosis the presystolic murmur is produced by auricular systole. In these cases prolonged A-V conduction may cause a different phenomenon. Where the auricular contraction comes at an abnormal time in diastole the presystolic murmur may come in mid-diastole or in early diastole.

The next higher grade of block is that in which occasional impulses from the auricle are completely blocked, the ventricle fails to respond, and the so-called "dropped beat" occurs. This type of block is usually easily recognized. If the carotid or radial pulse or apex beat is felt while the heart is auscultated, a silence will be noted at the time the expected beat drops out. Exercise will accelerate the heart rate and the dropped beats will disappear only to return when the rate slows down again after rest.

The next higher grade of heart block is the 2:1 block. In this condition the ventricle responds to alternate auricular beats only. It is a condition that may be suspected in any heart having a rate between 36 and 50, and it is relatively unstable. The ventricle quickening from time to time, and detection of such a change, will show the nature of the condition. Exercise will probably produce a sudden doubling of the rate with an abrupt halving during subsequent rest. Patients with mitral stenosis and 2:1 heart block may have 2 thrills and 2 diastolic murmurs. In certain cases 2 pulsations may be observed in the jugular veins to every ventricular pulsation.

The increasing grades of heart block are 3:1, 4:1, et cetera. These are all grades of incomplete heart block. When there is an abrupt transition from one to another high grade of block we may have the syncopal attacks typical of Stokes-Adams' syndrome.

In complete heart block the ventricle does not respond to any auricular impulses but sets up its own ideopathic rhythm. This condition is almost always the cause of heart rates below 35. The rhythm is quite regular and

the rate is not affected by exercise, emotional states, atropin, or amyl nitrate. This is important and I feel that any rate under 75 that is unaffected by exercise or atropin may be suspected of being due to complete heart block, as occasionally the condition may occur with rapid ventricular rates. Willius, in his "Clinical Electrocardiograms", shows a record of complete block with a ventricular rate of 100, and I have seen an electrocardiographic tracing showing a ventricular rate of 75. Careful auscultation in these cases will reveal a change in the first and second sounds from cycle to cycle. When auricular and ventricular systoles coincide, there occurs an accentuation of the first sound, while their occurrence close together may cause splitting or reduplication of the first or second sound. Muffled sounds due to auricular systole may sometimes be heard during the long pauses of ventricular diastole. In some patients occasional large jugular pulsations may be noted. These are due to joined auricular and carotid waves occurring when there is coincident systole of the auricles and ventricles.

Premature contractions or extra systoles are contractions arising from some focus outside the normal pacemaker or S-A. node. When some focus in the cardiac muscle becomes more irritable than the normal pacemaker it can give rise to impulse formation at a more rapid rate than the pacemaker, and the chamber in which the new impulse is formed will respond to this more rapid impulse. On this fact depends the prematurity of these contractions. They may arise in the auricles, ventricles or in the junctional tissue. When the new impulse arises in the ventricles they contract in response to it. The next normal impulse from the auricles reaches the ventricles when they are in a refractory state and they fail to respond to it, giving rise to the so-called compensatory pause. The time period from the normal beat preceding the premature contraction to the one following it is equivalent to that of two normal beats. The basic rhythm is not changed. When the premature contraction originates in the auricles, the ventricles respond as to a normal impulse. There is then a pause but the time period from the beat preceding the premature one,

to the first succeeding beat, is less than that of 2 normal beats. The original sequence has been disturbed. Recognition of nodal premature beats requires instruments of precision and, in fact, determination of the site of impulse formation of any premature beat may require electrocardiographic or polygraphic study.

Premature contractions may be found in any age group. In our series they were noted at ages between 18 and 80. Their recognition is usually easy. The physical signs depend upon whether the premature beat is sufficiently strong to raise the aortic cusps. If it is strong enough to raise these leaflets, when one listens carefully he will hear the first and second sounds of the normal beat followed by a second pair of sounds at a time shorter than the normal diastole, and forming with the preceding sounds a group of 4, followed by a perceptible pause. When the aortic valve leaflets are not raised, the preceding normal sounds are followed by a single sound, forming a grouping of 3, and there is an intermission of the radial pulse. When murmurs are present, very complex changes may occur in the auscultatory signs, depending upon whether or not the premature beat is strong enough to raise the aortic valve leaflets. A systolic mitral murmur usually accompanies the premature as well as the normal beat but it usually is short and may be absent. Aortic systolic and diastolic murmurs are usually present at the base of the heart when the premature beat raises the aortic valves. A mitral presystolic murmur is usually absent whether the premature beat is auricular or ventricular. This is due, in the case of auricular premature beats, to weakness of the premature beat or to its coincidence with the preceding ventricular systole. In some cases of auricular premature contraction a presystolic sound does occur. Multiple premature contractions, especially if they are arising from focal impulse formation in both the auricles and ventricles, may be hard to distinguish from auricular fibrillation at times. When it is possible to exercise the patient, or when fever or emotional states raise the heart rate, there will be a tendency for premature contractions to disappear and the rhythm will become more regular; becom-



ing more irregular again as the heart slows down. The opposite is true of auricular fibrillation.

When the normal heart rate is interrupted by a series of rapid and regular beats, varying in rate between 100 and 200 per minute, the series starting and ending abruptly, we have the condition known as simple paroxysmal tachycardia. When these rapid ventricular beats are all in response to auricular contractions, the condition is known as paroxysmal auricular tachycardia. This condition is not limited to any age group but has been observed at all ages. The one patient in our series was 24, but gave a history of typical attacks at the age of 9. In this condition some new center of impulse formation in the auricular wall begins to put out impulses at a rate greater than the normal pacemaker. While such impulses are being put out, this new center dominates the heart movements. As has been mentioned, premature contractions are responses to an impulse from some ectopic focus. Paroxysmal auricular tachycardia may be considered both clinically and physiologically as a regular series of auricular extra systoles. The first beat of the series is premature and there is a definite pause after the last beat of the series. Lewis and other observers have demonstrated that the regularity of the series depends upon the fact that the new impulses are elaborated from a single focus, removed from the pacemaker.

Diagnosis of this condition is usually not difficult. If either the onset or end of a paroxysm is observed its absolute abruptness makes the diagnosis plain. If the onset or end of a paroxysm is not observed, careful inquiry into the history of previous attacks may bring out the typical abruptness of the paroxysms, the patient sometimes declaring that the attacks end with the sensation of the heart turning over in the chest. An important diagnostic point is the regularity of rate during any given attack. Once the rate has been established in an attack, repeated determinations of the rate will not show a variation of more than 3 or 4 beats per minute during that paroxysm, whether it lasts but a few minutes or for many hours. There are very occasional exceptions to this rule. I have seen

one case, reported by Wolferth, in which the rate varied between 164 and 178 during the same attack. In this patient there was an associated sinus arrhythmia. Changes of posture, holding the breath, repeated swallowing or vagal pressure will not change the rate although any of these may stop the paroxysm. Murmurs which have been present usually disappear during a paroxysm. This is of importance in mitral stenosis in which attacks of paroxysmal tachycardia are relatively common.

In the absence of underlying disease of the heart this condition is of little more significance than premature contractions. The diagnosis of paroxysmal tachycardia of ventricular origin is much less frequently made but in many cases may be made without the aid of instruments of precision. Its recognition is of much greater importance because of the greater seriousness of its prognosis and the graver disease of the heart of which it is usually an accompaniment. Not infrequently this condition develops as a complication after an acute coronary occlusion. In fact, upon its correct recognition and treatment may depend the life of the patient. Levine has pointed out the clinical differentiation of paroxysmal tachycardia of ventricular origin from that of auricular origin. In each case the onset and termination of the attack is abrupt. Careful auscultation over a long period of time may reveal slight irregularity in the rhythm in the case of ventricular tachycardia in contrast to the absolute regularity of rhythm in the auricular type. There have been variations between consecutive beats as high as .19 sec in a case reported by Strong and Levine and as high as .32 sec in a case reported by White. Another characteristic noted by careful auscultation in a case of ventricular tachycardia, is some alteration in the quality of the first sound, which may be muffled, accentuated or reduplicated, whereas in the auricular type of tachycardia there is a uniform *tic tac* quality to the sounds. The reason for this phenomenon is the same as in the case of heart block, the auricular systole falling in conjunction with or close to the ventricular systole. It does not make any difference whether auricular systole occurs as a re-

sult of the normal impulse arising in the S.-A. node of an independently contracting auricle, or in response to reversed impulses from the ventricle. Another distinguishing point of ventricular paroxysmal tachycardia is the fact that vagal or ocular pressure has no effect on the tachycardia; while in many instances of auricular tachycardia such procedure will terminate the paroxysm.

I have mentioned that in paroxysmal auricular tachycardia the normal impulses of the auricle are supplanted by a series of new and regular impulses. When this new and rhythmic series of impulses varies in rate between 200 and 360 per minute we have the condition known as auricular flutter. There may be little difference between a rate of 190 and one of 210 beats per minute but there is a great difference between one of 190 and one of 300 a minute. There are special characteristics accompanying extremely rapid auricular rates, and Lewis, in describing these differences, has arbitrarily fixed upon the rate of 200 per minute because that is the point where these characteristics begin to manifest themselves, and chief of these characteristics is the almost invariable association with heart block. This is usually a 2:1 heart block with an auricular rate between 260 and 320 per minute and the resulting ventricular rate ranging from 130 to 160 per minute. Other grades of block may be present so that the patient with an auricular rate of 300 per minute may have a ventricular rate of 150 beats per minute (2:1 blocks), 75 beats per minute (4:1 block), or 30 to 35 beats per minute (complete dissociation). Another characteristic similar to the cases of paroxysmal auricular tachycardia is that the rate, once set, is extremely uniform. Unlike paroxysmal auricular tachycardia, the attacks of flutter usually last for months or years.

The clinical diagnosis of flutter is not always easy and frequently special means (usually the electrocardiograph) are required to diagnose the condition. While flutter is usually a disease of old people it may occur at any age. Lewis had observed it in a child of 9 months. Our 4 patients were 24, 33, 52 and 54 years old, but for 2 of these patients diagnosis was made on clinical grounds, without

electrocardiographic confirmation, and so, is open to question. The finding at various examinations of a persistently regular rate of between 130 and 160 beats per minute in an elderly person should always make one suspect flutter. Changes of position, rest or exercise have no effect on the rate. The single exception to this is that occasionally, under stress of emotion or exercise, the associated heart block is done away with, and the ventricle jumps suddenly to the full auricular rate. This occurred in 1 of our cases, the auricular and ventricular rates being 256. Pressure on either the right or left vagus will produce a conspicuous slowing or a lapse of many beats. In 1 of our cases not only was a marked slowing produced by vagal pressure, but there was an equally marked diminution of the intensity of the heart sounds. Full doses of digitalis will cause ventricular irregularity and may change flutter into auricular fibrillation. In the occasional cases where the ventricular responses are irregular slight exercise will accelerate ventricular action and induce regularity of the pulse with the development of 2:1 heart block.

The hypothesis best explaining flutter was first propounded by Mines and Garry and elaborated by Lewis, and is generally accepted today. According to this hypothesis flutter is brought about by a change in the physiologic condition of the muscle that delays the rate at which the contraction passes through it. Thus, the contraction wave having passed through part of the auricular wall and returned to its point of origin, finds the contraction process entirely passed away there, so that this region is again capable of contracting. This it does, and the contraction again passes along its same path, returns to its point of origin, which is again irritable, and again contracts. There is thus formed a ring around which the impulse is constantly coursing. To this phenomenon Garry has given the term "circus contraction". From this main ring, impulses are given off radially to the rest of the auricular muscle. Lewis has found that the pathway of this ring is usually around the superior vena cava, the right pulmonary veins, the inferior vena cava and back to the starting point. Lewis and his co-workers feel that the



theory of circus contraction also explains auricular fibrillation. In the latter case the pathway of the circus contraction is not always the same. There is an increased rate of impulse formation and a decrease of the refractory period of different individual muscle fibers. This leads to continued variations in the central path and consequent variations in the radial paths by which the contraction spreads to the outlying parts of the auricular muscle. Electrocardiographically, it has been found that the rate of circus movement usually varies from 350 to 500 per minute. Ventricular response depends upon the number of effective impulses that reach the A-V system. It is not at present known whether only certain stimuli are effective in giving rise to A-V impulses, whether the impulses come to the A-V system irregularly or whether there may be a building up of small stimuli in the node until the level of impulse formation is reached. In any case, the ventricular response is close to the maximum possible considering its refractive period. Clinically, the condition of auricular fibrillation has been known for many years under a variety of names. It has been spoken of as *delirium cordis* and *pulsus irregularis perpetuus*.

Auricular fibrillation is not confined to any age. In considering the age incidence of this condition it is well to divide cases into rheumatic and non-rheumatic groups. In our series of 53 cases, 21 in the rheumatic group had an average age of 41.6 years, while the non-rheumatic group of 32 cases had an average age of 61.8 years. In the rheumatic group the youngest fibrillators were 11 and 12 and the oldest was 56. In the non-rheumatic group the youngest was 46 and the oldest 75. Auricular fibrillation is typified by an absolute irregularity in the force and rhythm of ventricular systole. As many of the ventricular contractions may fail to lift the aortic valve leaflets, certain beats fail to force blood out into the circulation, and as a result the radial pulse rate is often less than the ventricular rate, producing the so-called pulse deficit. On auscultation one finds the intensity of the sounds constantly varying; due to difference in force of the contractions. This is further emphasized when the brachial artery

is totally occluded by a blood pressure band and the occluding pressure dropped very slowly. When the sounds first come through only a few of the strongest beats will come but as the pressure is further reduced more and more beats come through. Pressure on the vagus in the neck always slows the ventricles and makes the irregularity more evident by blocking some of the impulses from the auricles. In mitral stenosis the presystolic murmur is usually considered to disappear. This is not exactly true but its time in the cardiac cycle is changed and often a sound may be heard in diastole, either early with a pause before the succeeding first sound, or running through the entire period of diastole. Mitral systolic murmurs accompany each ventricular contraction except when the rate is very rapid. Aortic murmurs may be present or absent, depending upon the efficacy of the contraction. Other types of irregularity, premature contractions, heart block, etc., are only confused with auricular fibrillation when the ventricular rate of the latter is slow.

In case of doubt, differentiation can easily be made by having the patient exercise a little. In cases of fibrillation the irregularity will become more pronounced with the increased ventricular rate resulting from the exercise, and less pronounced as the heart slows down again with rest. In the other conditions the reverse is true, the increased rate having a tendency to abolish blocked beats or premature contractions, which return again as the rate slows.

One form of irregularity not due to changes in the conduction system is alternation of the ventricles, the condition producing *pulsus alternans*. Two views as to the fundamental nature of the condition are held: "That it is due to a periodic variation in the contractility or irritability of all the cardiac elements, so that they contract to a maximal extent only during every alternate beat, i. e. that a condition of hyposystole periodically recurs. (2) That it is due to the periodic elimination or depression of certain fractionate contractions. Most of the experimental work favors this latter interpretation" (Wiggers). Clinically, *pulsus alternans* is best recognized with the aid of the sphygmomanometer. When the

pressure is lowered in the cuff to the point where the beats first come through, a certain number will be heard. As the pressure is slowly lowered in the cuff a point will be reached where suddenly twice the number of beats will come through. The only condition with which *pulsus alternans* may be confused is a *pulsus bigemini* due to premature contractions. The distinguishing feature is that in the latter condition there is a longer pause after the weaker beat. In *pulsus alternans* the pauses are usually equal after the beats. If there is any difference, the longer pause comes after the stronger beat, never after the weaker.

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### SIGNIFICANCE AND DIAGNOSIS OF SILENT MITRAL STENOSIS\*

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J. POLEVSKI, M.D.,

Newark, N. J.

Cardiac collapse is still frequently an unanticipated complication which often vitiates the expected good results of a skilfully performed surgical operation. To obviate such a catastrophe the conscientious surgeon will first examine the chest for respiratory and circulatory difficulties. His more cautious colleagues will frequently invite a cardiologist to perform such an examination. But, strange as it may sound, after all precautions are taken, unexpected fatalities may occur.

Modern cardiology has made many steps forward and has succeeded in detecting cardiac lesions heretofore undiagnosable. The electrocardiogram will detect an unusual block with a relatively high pulse rate, say between 50 and 60, that would pass otherwise for a simple bradycardia.

However, there are still many pathologic conditions that escape diagnosis in spite of all efforts and modern methods of precision. The catastrophic issue of this situation in a postoperative case is obvious. Similarly, many a life might be saved if the expectant mother were warned of the danger incident to strain

of pregnancy and parturition, and if her cardiac condition were carefully scrutinized and the risk evaluated. The appraisal of probable longevity of life in insurance work is very often embarrassed because of many cardiac possibilities that are as yet undiagnosable.

To these unexplored fields of greatest import belongs the condition not at all mentioned in the American literature—silent mitral stenosis.

In his book—Facts on the Heart—Richard Cabot, in an analysis of 208 cases that came to autopsy, finds the following: (1) Pure mitral stenosis without any other valve lesion is more than twice as common as the combination of mitral stenosis with other valve lesions, and considerably more common than all the other combinations put together. (2) That more than half the cases of mitral disease are not recognized during life in hospital patients. (3) Mitral disease is compatible with fairly long life, and that the cause of death in more than 50% of the cases is due to extraneous noncardiac conditions, such as intercurrent infections or strain of surgical operations.

Furthermore, he explains the reason for nonrecognition of the more than 50% of the cases that proved on the autopsy table to be mitral stenosis, by the fact that more than 50% of the cases do not manifest the outstanding physical signs of the lesion which the average clinician looks for in his effort to establish a diagnosis of stenosed mitral valve; namely, a presystolic or diastolic murmur over the apex or the diastolic or presystolic thrill. In other words, 50% of the cases are silent in the sense that they do not betray the presence of the lesion by the outstanding diagnostic signs—diastolic murmur or thrill.

The writer recalls very vividly cases that were diagnosed as cirrhosis of the liver because of the enlargement of that organ without any other apparent cardiac signs; also other cases that were diagnosed as cholecystitis and operative procedure urged, because of the slight temperature and subcostal tumefaction and tenderness that prevails frequently in these cases, again without any other manifest signs of mitral stenosis.

It is obvious, then, that it becomes a matter of great practical importance to bear in

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\*(Read at the 165th Annual Meeting of the Medical Society of New Jersey, Asbury Park, June 4, 1931.)



mind the possibility of the presence of this condition—silent mitral stenosis—and to use whatever means we may have at our command to enable us to decrease the proportion of nondiagnosed cases.

When we realize that in mitral stenosis, the valves, instead of occupying their normal position during diastole, alongside the ventricular walls, assume a more horizontal position and, that the thrill and murmur are ultimately produced by these horizontally placed yet partly movable flaps being set in vibration by the stream of blood coming down from the auricle; it become obvious that, if for some reason or other these valves become rigid and thus incapable of vibration, as, for instance, in the case of sclerosed and calcified flaps—very common in button-hole stenosis—neither murmur nor thrill can possibly occur. It thus requires little imagination to conceive the mechanism of silent mitral stenosis. Yet, the writer, after a very exhaustive search through the American literature, could find no clear-cut description of the pathology, *modus operandi*, significance and diagnosis of this particular type of mitral lesion.

That the murmur and thrill are not the only outstanding signs of mitral stenosis has been realized by many cardiologists. Thus, Cabot urges the clinician, in the absence of these pathognomonic signs where a valvular lesion is suspected, as in cases where there is a history of rheumatic fever or chorea, to watch for: a suggestive sharp, snapping, first sound over the apex; for absence or feebleness of the second cardiac sound over the apex; for reduplication of the second or so-called third sound over the pulmonic area or occasionally over the apex, which reduplication, by the way, is due to a lack of synchronicity in the closing of the pulmonic and aortic valves brought about by the increased blood pressure in the pulmonary circulation causing an earlier closure of the pulmonary valves. Or, it may be due to separation of the auricular contraction sound from the ventricular systolic sound by prolongation of the auriculo-ventricular interval. He also urges the clinician to watch for auricular fibrillation, which is most common in these cases, or for evidence of congestion at the bases of the lungs.

All these signs, in the absence of the characteristic murmur and thrill, should arouse the suspicion of the presence of a mitral stenotic lesion. However, realizing that during the state of decompensation most of these signs may be absent, it becomes clear that in a great many cases of silent mitral stenosis diagnosis is almost impossible; which explains the 50% failure in diagnosis in Cabot's series, very many unexpected cases of postoperative and postpartum cardiac collapse, and many deaths so embarrassing to the insurance physician.

It was the writer's privilege to make a few observations in these cases that have proved helpful to himself and his associates to establish a diagnosis in many doubtful cases. On placing the palm of the hand to the left of the sternum, with the patient in recumbent position and exerting a fair degree of pressure on the underlying chest wall, the examiner experiences a heaving upward of the thoracic wall against his palm, which heaving cannot be obliterated by any amount of downward pressure. As a matter of fact, the greater the pressure the examiner exerts the more apparent the irresistibility of the upward heaving of the chest immediately to the left of the sternum.

This heaving is due to the hypertrophy of the right ventricle that is usually present to a greater or lesser extent in all cases of mitral stenosis. The writer seldom failed to find this phenomenon in any case of mitral stenosis, open or silent.

Another aid we may resort to in doubtful cases is a method that has been in use abroad for quite some time but which has been introduced into the States only recently. In fact, the writer is priding himself on the fact that he was one of the first, if not the *very first*, to introduce it. It is the visualization of the retrocardiac part of the esophagus by filling it with barium under the fluoroscope. Normally the esophagus courses downward in a fairly straight line. In mitral stenosis the left auricle is enlarged. This enlargement is most pronounced posteriorly, where it presses on the esophagus, thus indenting it markedly. The picture thus seen by aid of the fluoroscope is characteristic and establishes

the diagnosis beyond any doubt. Electrocardiography is helpful.

To recapitulate: Silent mitral stenosis is a definite entity, the pathology of which consists of fixed, nonvibrant, calcified, valvular flaps. It is frequently of the button-hole type and is diagnosable. Its recognition is of utmost importance in the state of pregnancy, in conditions with right subcostal pain, where either a mistaken diagnosis of hepatic cirrhosis is made, or, frequently, a serious operation of cholecystectomy is resorted to because of the erroneous diagnosis of gall-bladder disease, in preoperative cardiac examination, and, last but not least, in examination for life insurance.

#### DISCUSSION

*Dr. Harvey M. Ewing* (Newark): Dr. Marvel's paper is a very timely one and a very complete one and I enjoyed it very much. The arrhythmias, I think, present the point of greatest confusion in the mind of a man who is in general practice and they are among the hardest conditions to diagnose. You can hear murmurs, and you can time them fairly easily, but the arrhythmias are not always clear. The arrhythmia that seems to present the greatest difficulty is the differentiation between extra systoles and auricular fibrillation, and both are extremely common. I think the history is extremely important in the extra systolic arrhythmias. In the majority of cases you do not have a history that suggests heart disease. The etiologic factors are usually absent. There are no symptoms of heart failure, as a rule, and the patient presents none of the appearances of a person who has serious heart disease. In the mitral cases, as Dr. Polevski said, fibrillation is very common. It is also common in the older degenerative cases, and in those cases you do have in practically every instance a history, either etiologic or clinical, that helps a great deal in making your differentiation.

The extra systoles are in the vast majority of cases not as constant as fibrillation. They occur in groups of 1, 2, 3 or 4, rarely more, and then there are intervals of a perfectly normal, regular rhythm which you can easily recognize. In fibrillation, however, you have a continuous irregularity. Extra systoles quite commonly disappear when the patient exercises or speeds up his heart: fibrillation does not, but it often becomes more evident as the patient's heart increases in speed. Of course, one can't always carry an electrocardiograph around in his vest pocket, nor even a polygraph. I have found the sphygmomanometer, which every doctor does carry, a great deal of help in the differentiation of these arrhythmias.

In using the sphygmomanometer you not only have the visual impression but you also have the auscultatory impression. You are both seeing and listening to the rhythm of the heart and, particularly if you use one of the needle type, you have more of a variation, that is, more of a swing to the needle, which you can watch as you release the pressure on the cuff and come down to the systolic pressure. You can actually see the jump of extra systoles and the long compensatory pause and the return to normal rhythm, and you can

visualize fibrillation. I think if you practice using the sphygmomanometer, you will get excellent results. You can get it to some extent in the mercury instrument but the needle instrument is a little more imperfect. There is not as much swing to the mercury column as there is to the needle in one of the aneroid types.

There is one thing that Dr. Marvel spoke about which I think is not quite clear, and that is that the attack of paroxysmal auricular tachycardia was probably due to a group of premature or ectopic contractions occurring in regular sequence. That may be the explanation of it and it seems likely, in that most of these cases do begin with an ectopic or premature type of contraction, and at the close of the paroxysm there is a compensatory pause. But I think there is also a very strong possibility, and it is recognized in the literature, that the attack of paroxysmal tachycardia is dependent upon circus movement, the same as fibrillation and flutter. This question is still very much in the air. The patient, at the onset of these arrhythmias, is often said by the man in charge to have had an acute dilatation, and the physician is frequently terrified and the family is more terrified. Many of them do not deserve to be classified as serious. I think if you will study them and read Dr. Marvel's paper, when published, and try to visualize these arrhythmias, you will not do the great deal of harm that is often done by characterizing the patient as a serious heart case, when really he has a rather harmless arrhythmia.

*Dr. A. E. Jaffin* (Jersey City): I consider it a real privilege to discuss this very interesting subject of Dr. Polevski's paper because I feel in doing so I may possibly be able to contribute in a small way toward the avoidance of some of the catastrophes that occur surgically, and also to avoid some of the inevitable decompensations, particularly in the button-hole type cases which, when they once begin, go down hill so much more rapidly than in other types of mitral stenosis that are more easily recognized and at an earlier stage.

I thought that perhaps the best way to briefly summarize a few aids that occurred to me was this:

First, to look upon patients as they come to us, where we suspect cardiac disease at all, from an etiologic basis in the history of rheumatism, which plays such an important part in this. Secondly, from clinical signs, under the heading of which come: (1) Inspection: facial congestion, typical mitral flush. (2) Palpation; small pulse. (3) Percussion.

You have heard already about the mitral contour. Those of us who have been fortunate enough to study under some of the Continental masters in cardiology have returned with an impression of heart contour that does not prevail in America. They speak there of the typical mitral contour or aortic contour, that is the so-called normal contour, with concave left border, and the mitral contour in the case of mitral stenosis, a rather straight or even convex contour. Therefore, anything that will demonstrate to us a mitral contour is very important evidence toward the diagnosis of stenosis. While there may be a good deal of difference of opinion about the question of percussing out the cardiac borders, there is very little, I think, with regard to the dulness one will get in the left second intercostal space close to the sternum in mitral stenosis due either to the enlarged conus of the right ventricle, or possibly also to the increased size of the left auricle. But that is quite definite and once that little concavity is filled out,



you already have suggestive evidence of mitral contour.

I have already referred to increased dulness at the lower end of the sternum, and I might say that has been noted to appear even earlier than the x-ray findings that Dr. Polevski has already mentioned. Some authors also speak of dulness in the left intrascapular space, due to the enlarged left auricle; the Vaquex-Bordet sign.

Under (4), auscultation, we have: (a) Low systolic blood pressure. (b) Accentuated second pulmonary sound, on account of hypertension of pulmonary circulation. (c) Snappy first sound at apex, on account of poor filling of the left ventricle. (d) Auricular fibrillation.

Then, finally, (5) fluoroscopy. I would rather speak of fluoroscopy than roentgenology because I think that the film gives us considerably less information than does the fluoroscope.

Evidence of enlargement of right ventricle: (a) Increased prominence of the conus or so-called outflow tract discoverable early with heart still compensated. (b) Increased prominence of the lower part or inflow tract, which is more apt to be found later with more or less decompensation, the former demonstrable in the left anterior oblique position, the latter in the right anterior oblique position. (c) Evidence of enlargement of the left auricle as a third curve on the right border or as a bulging of the heart shadow in the posterior mediastinal space, best demonstrated after the administration of thick barium in the esophagus. This has been practiced since 1927.

I have left the electrocardiograph until last because it is the least important. We can diagnose hypertrophy or dilatation without it, but if one gets a long P-R interval, I think that is a big help; also in right ventricular preponderance; auricular fibrillation; are very suggestive signs.

As causes for silent mitral stenosis, I have listed the following: (1) In early pathology. (2) With auricular fibrillation. (3) With weakened heart action. (4) With marked cardiac enlargement with overshadowing complications.

These signs have been helpful to me and I think that the interest in silent mitral stenosis is a very timely one, particularly in understanding the pathology, the mechanism, and its association with factors that diminish the physical causes for producing a murmur. Most of them have been referred to—the weakened heart action, stiffness of the valves, and I should like to add only 1 or 2 more, meaning, such things as obliterated pericardium where there isn't sufficient cardiac motion.

In looking through White's new book, with this point in mind particularly, I found but a few lines on the subject and wrote to Dr. White about it. He agreed with me that the subject deserved a great deal more attention than it received and hopes to enlarge on the subject in his next edition.

*Dr. Hyman I. Goldstein* (Camden): When we realize that in this speedy life of ours, with airplanes traveling at 250 miles per hour, with the tremendous increase of hypertensive heart disease, with the great increase of cardiac mortality and morbidity, cardiovascular disease has now assumed leadership as the herald of men's death formerly held by cancer and tuberculosis and many of the previously feared infectious diseases, it certainly is proper for the oldest state medical society in this country to place great emphasis on consideration of heart diseases. The subject of silent mitral stenosis was brought to you this afternoon in an excellent manner by my friend Polevski, and while a rose smells just as sweet under any other name, it is also

true that mitral stenosis, in America, is just as important, and of as much interest, under the diagnosis of mitral disease or catastrophic mitral stenosis, as under the technical term of silent stenosis. I wish, however, to correct any wrong impression that American literature falls so far short as never to have considered silent mitral stenosis. James Tyson, 25-30 years ago, emphasized the importance of silent mitral stenosis, and David Rion, only in the past few years, very beautifully emphasized the subject of undiagnosed silent stenosis. The condition is well known; as a matter of fact, we know too much about the failure of diagnosing it, so, a contribution to American literature as given to us today by Dr. Polevski certainly is worth while.

Emphasis might be placed on certain of the physical signs and symptoms in the diagnosis of the so-called mitral stenosis by trying to present a few symptoms that will be useful to the large number of practitioners in our state who are not so fortunate, perhaps, as Dr. Jaffin and Dr. Polevski in possessing fluoroscopic outfits or expensive electrocardiographic machines. The 2 signs I wish to emphasize are to be observed in children where mitral stenosis begins most often as a result of rheumatism, and in adults with fairly flat chests, and in women without prominent breasts, where also you will find that the left nipple is perhaps higher than a horizontal line drawn through the right nipple. Another very suggestive thing, which unfortunately was not emphasized this afternoon, is that in a study of the lungs we often find patches the size of a dollar that are definitely dull all over the chest, not only below the left scapula. Sir James Barr emphasized this observation, as far back as 1886, in silent mitral stenosis.

The probability is that pure mitral regurgitation is a rarity; that mitral stenosis is a common occurrence; that when we do get mitral insufficiency it is secondary to a failing heart.

*Dr. Philip Marvel, Jr.*: I am very glad that Dr. Ewing brought out the importance of using the sphygmomanometer in the differentiation between premature beats and fibrillation. I had mentioned it in my paper, but when the President told me I had very little time, I skipped over that phase of the matter.

I was very much interested in Dr. Polevski's paper and in Dr. Jaffin's discussion of it. I think, myself, that the fluoroscopic examination is extremely important in these cases. We have a small series of cases now in children with rheumatic histories, that were first suspected of possible mitral stenosis because of the typical mitral conformation shown in fluoroscopic examination of about 12 children between the ages of 9 and 14, that we have been following for a period of 3 or 4 years; 5 of them have since developed the typical stenotic murmur. I think it is very important, wherever possible, to fluoroscope patients not only in the anterior and posterior positions but in the oblique position.

*Dr. J. Polevski* (Newark): I want to thank Drs. Jaffin, Goldstein and Marvel for discussing my paper and for their very generous attitude toward its contents. Now, I wish to make myself clear. I did not attempt to state here all the diagnostic points and methods one may use in studying a case of either ordinary mitral stenosis or of silent mitral stenosis.

In a previous contribution, April 1930, in the *Medical Journal and Record*, I spoke of percussion of the upper and lower ends of the sternum as

one of the simplest aids in the diagnosis of a mitral lesion. I have also described, in the same article, the indentation of the retrocardiac part of the esophagus that can be easily visualized in a suspected case of mitral stenosis: this requires ingestion of barium paste. For a more detailed description of these methods, I should like to refer you to the above mentioned article.

On this occasion, I want to stress chiefly the importance of fluoroscopy in cardiac examination. Seeing the heart, getting an idea of its shape and size, the outline of the component chambers will give us by far more information concerning the normality or abnormality of this vital organ than any other single method at our command.

As to the statement by Dr. Goldstein, that there are periods in all cases of mitral stenosis that one

can call "silent" because of disappearance of the murmur and thrill, caused by weakening of the myocardium or other factors, and that such silent periods have already been described by many cardiologists under various terms, I wish to answer by saying that, in this contribution, I have attempted to describe a disease entity, a special type of mitral stenosis, where the pathology is peculiar—a severe button-hole stenosis caused by sclerosed and most often calcified nonvibrant flaps. In such a case, the condition is always silent and is not merely a transient or terminal phase in the course of the history. Neither rest nor aggravation of the condition will bring out the murmur or thrill. I have attempted to describe its pathology, the mechanism of its symptom-complex, its grave significance, and the method of its detection.

## FORCIBLE EXTENSION IN AN ANKYLOSED JOINT

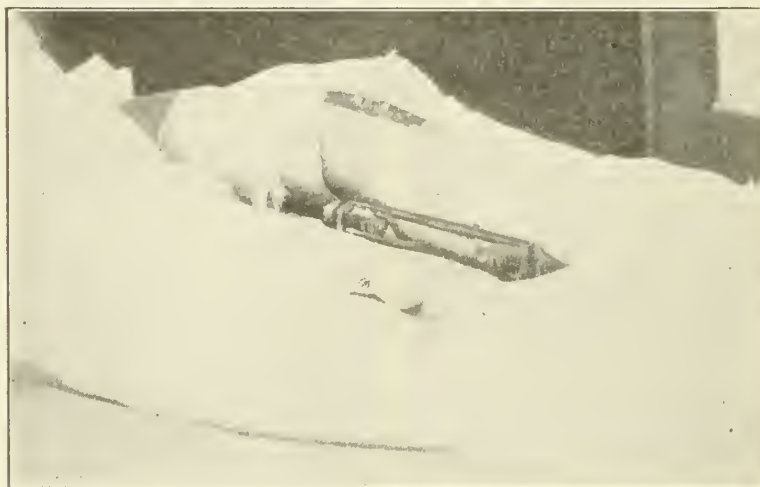
FRANKLIN H. CHURCH, M.D.,

Salem, N. J.

In order to secure gradually increasing extension of a joint fixed in flexion, several

extended position or with a straight limb. It is perfectly evident that fixation of a leg in extension will give a fair locomotion, while fixation in flexion is completely crippling.

The patient, E. G., white female, aged 30, married, who has had 3 living children, and is Wassermann negative, was seen in September 1929, having been ill 2 months with a solitary arthritis of the left knee. At that time



Turnbuckle and one brace shown with *Extension* obtained

methods have been employed; wedging a cast, traction, and manipulation of various kinds. The application of small turn-buckles for the control of injured or ankylosed joints, seems to be a method which is gradually rising in popularity. In this case a very large turn-buckle was employed in a cast to change an ankylosis in extreme flexion into ankylosis in

the knee was fixed in extreme flexion, and there was considerable swelling and brawny induration. Tenderness was extreme and no manipulation or traction was permitted. Laboratory facilities did not allow any detailed study of the arthritic process.

As this is not a discussion of treatment of the arthritides, we will not consider the means



taken to control the infection; which were numerous and varied. At last, a degree of quiescence was obtained, when manipulation could be undertaken. She was admitted to the Salem County Memorial Hospital, where it was found that there were numerous adhesions in and about the joint, fixing it rather firmly in extreme flexion, and there was also the usual subluxation of the head of the tibia due to the pull of the ham-string muscles.

Under ether, it was seen that a considerable degree of mobility could be obtained by forcible manipulation and the extension gained was retained by a circular plaster cast. This trauma relighted the arthritis for a week or more. After this had subsided the patient was taken to the treatment room and a large, 10 in. iron turn-buckle, such as may be obtained in any hardware store, having had the protruding ends of the bolts flattened and bent by a blacksmith to suit, was incorporated by further plaster bandages into the back of the cast. The bolts of the turn-buckle were left as closely together in the center as possible. Two other jointed iron straps were also incorporated on each side of the knee for support. After the fresh plaster had hardened for a few days, a space 2 in. wide was cut entirely through and removed from about the knee, and extension obtained slowly by taking a turn or two of the turn-buckle each day as the comfort of the patient would allow. The distance gained between the screws was about 8 inches. After some weeks, and the maximum of extension was gained, the patient was allowed out of bed on crutches from which she graduated to a cane and then to "free wheeling".

At the end of 20 months she has good locomotion; attends to her household duties and gets about nicely. The joint is fixed in extension with only a very small amount of motion; and while the joint is occasionally painful there has been no recurrence of the arthritis.

## OVER-LAPPING THE RECTUS MUSCLES FOR CORRECTION OF STRABISMUS; REPORT OF CASES\*

HARRY VARSIL HUBBARD, M.D.,

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In the summer of 1922, a new method of operation for correcting strabismus occurred to me. An attempt was made to work out the idea, and in April of the following year, after having operated on 6 patients by this method, I described it at the Ophthalmologic Section of the New York Academy of Medicine, and exhibited 4 of the 6 patients, the other 2 being still in the hospital. All those exhibited had parallel eyes and were cosmetically corrected.

Description of the operation now will show some changes in the original technic which have been adopted as the operation developed.

In the correction of strabismus it is quite well understood that results which produce a satisfactory cosmetic appearance, or orthophoria, do not by any means assure perfect results in every detail, as for instance, visual acuity and binocular single vision in many cases are obtained only after the most careful and constant efforts to train and develop the vision and fusion centers by the use of charts, stereoscopic pictures and many other devices now used for that purpose, following any operative procedure. In fact, patients who have had a true atropia since early life, with an amblyopia from disuse, constitute extremely difficult cases in which to produce binocular single vision; while, on the other hand, where deviation occurred later in life,

\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, Section of Ophthalmology, Otology and Rhinology, at Asbury Park, June 3, 1931.)

after fusion centers had been quite normally established and approximately equally acute vision had been developed in each eye, with perhaps a true alternating strabismus present, such patients give us great hope of producing not only orthophoria but perfect binocular single vision as well. This perfection is, of course, our first and ideal effort, but second only to this is the patient's appearance. In a case of strabismus, one eye may be very defective in vision, or practically useless so far as visual perfection is concerned, but if the strabismus is corrected and the cosmetic appearance made good, even though binocular single vision is not obtained, the patient, as well as the parent, is well satisfied, and a valuable service has been rendered.

This all tends to show the necessity for correcting every strabismic condition as soon as possible after it has been discovered, by refraction, correcting operation, or whatever means or method is decided upon. Ocular deviation due to paralysis, however, falls into a different category as to causes and results, as well as treatment, and will not be discussed at this time, inasmuch as shortening of a paralyzed muscle, by any method, will not give satisfactory results.

In cases where other means of treatment have failed, and operation is indicated and has been decided upon, the next step is, naturally, which specific operation shall be performed, and whether the best results may be obtained by depending on one method of operation alone, such as shortening one or more of the muscles, tenotomy or recession, or whether the effect of more than one method shall be combined to procure the results desired. For instance, when operating upon cases of marked convergent strabismus, one often finds a very thin, fragile and weak external rectus muscle with a very strong cord-like internal rectus. There, I am convinced, no method of shortening the weak muscle will overcome or balance the opposing stronger muscle, and therefore, if a shortening or strengthening operation is decided upon, or perhaps has previously been done, some method of weakening the opposing muscle, such as tenotomy or recession must be re-

sorted to; and this has been done for several of my patients, and it has been found that while guarded tenotomy may be needed in some instances it should not usually be done at the same time, nor too soon following the shortening method, which I shall describe, because the shortened muscle is increased in strength and grows in efficiency. One or both external or internal rectus muscles, as the condition may require, can be operated upon at the same time with beneficial results. The amount of correction needed may be calculated in millimeters, figuring 1 mm. to every 5° of strabismus; and more than 15° of deviation usually requires operating on more than one muscle.

Another point which should be mentioned is, that no matter what method of operation be resorted to, it is frequently necessary to do 2 or more operations before satisfactory results are obtained. These operations should not be done in too rapid succession; better wait several weeks, or even months, until the muscle balance is well settled, as changes in muscle tone and scar tissue will naturally develop changes in that balance.

I would not give you the impression that this operation is the sole panacea for correction of all forms and conditions of strabismus, but I do believe it to be a simple and efficient method for shortening these muscles.

#### DESCRIPTION OF OPERATION

The technic, which I shall illustrate by lantern slides, follows:

A meridional incision is made through the

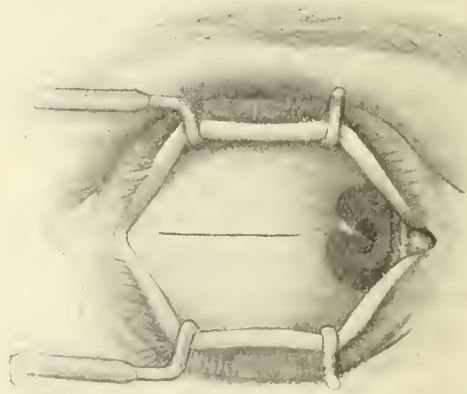


Fig. 1.



conjunctiva and capsule of Tenon, along the line of the muscle which it is desired to shorten, extending well back toward the canthus in order to bare the muscle for a considerable distance; and this is done with forceps and scissors. The entire muscle is then

mm. apart, or at about  $\frac{1}{3}$  of the width of the muscle. The needles of the second suture are then passed up through the muscle tendon, in the same manner but 4 to 5 mm. away from its insertion. The needles of the sec-

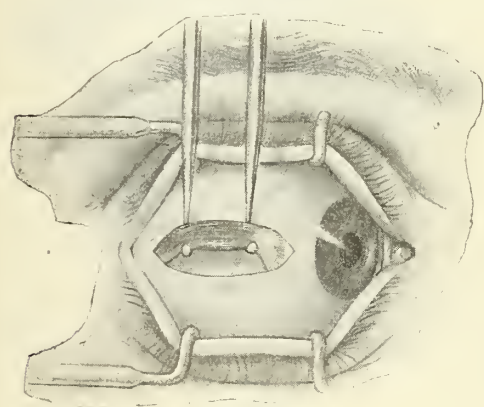


Fig. 2.

picked up with a strabismus hook, and a second hook is applied to hold the muscle on a stretch. A pair of rigid advancement forceps is then applied to secure the muscle so it cannot slip, at a distance from the muscle insertion equal to about twice the number of

ond suture are then drawn along their respective sides of the muscle, and passed from below upward through the muscle at a distance from where the suture first pierced the

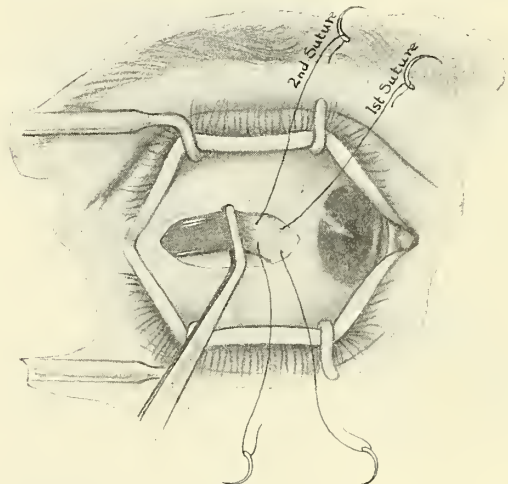


Fig. 4.

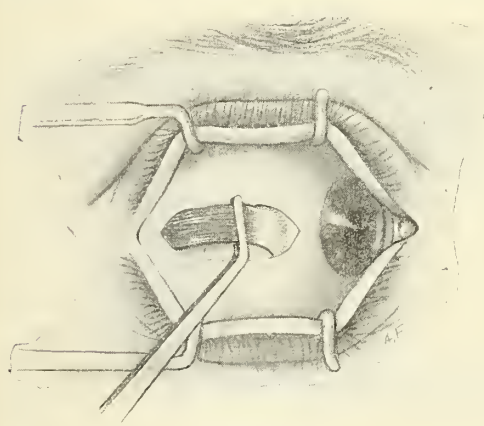


Fig. 3.

millimeters the muscle is to be shortened, calculating 1 mm. to every  $5^\circ$  of strabismus. Two sutures of No. 3 black silk are then prepared, with a needle threaded on each end of both.

The needles of the first suture are passed, from beneath upward, through the tendon close to its insertion, and approximately 2

tendon, which is 3 times the number of millimeters of deviation, calculating 1 mm. to every  $5^\circ$  of deviation, as stated above, and at  $\frac{1}{3}$  the width between the muscle edges. The first suture is then again taken up and the needles passed in the same manner, from below upward, only 4 or 5 mm. forward from

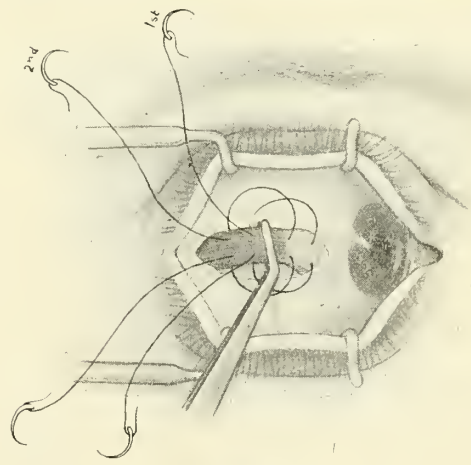


Fig. 5.

where the second suture was placed. The ends of the sutures are then laid aside in their respective positions, and with scissors the muscle is cut across completely at a position

the conjunctiva in good apposition to cover all the muscle end and entire wound, then tie the sutures, and the operation is complete. Two drops of 20% argyrol solution is in-

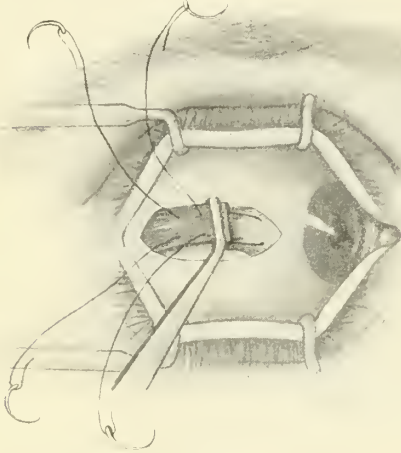


Fig. 6.

just to the corneal side of the forceps, being extremely careful not to cut the sutures.

The operator next draws the cut end of the muscle up over the tendon, toward the cornea, with the forceps, which are already applied, at the same time pulling the cut end

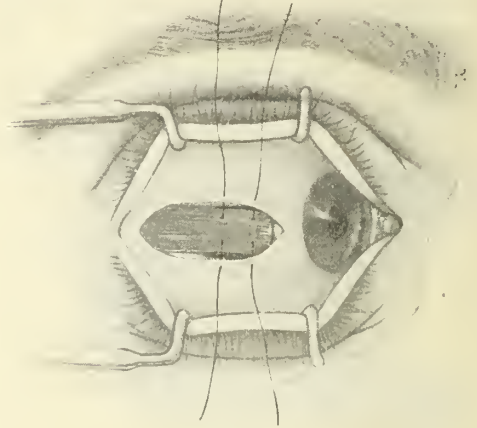


Fig. 8.

stiled, and a bit of petrolatum alba is smeared over the border of the lids, and the usual dressing and bandage applied over both eyes.

On the second day, dressings are removed, the eyes inspected, and, if parallel, 20% argyrol solution is instilled and dressing re-applied for another day; but, if the strabis-

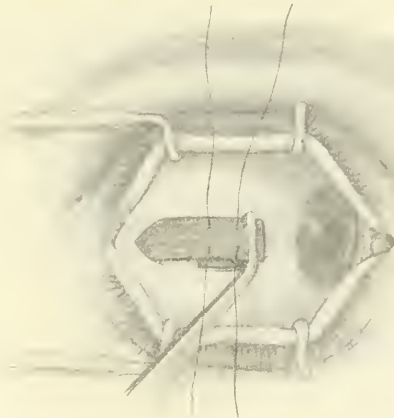


Fig. 7.

of the tendon down under the muscles with a pair of simple mouse-toothed forceps, as the assistant or nurse tightens the sutures numbered 1 and 2. The sutures are then passed through the conjunctiva, on either side, and tightened as the forceps are removed from the muscle. Before tying the sutures, place

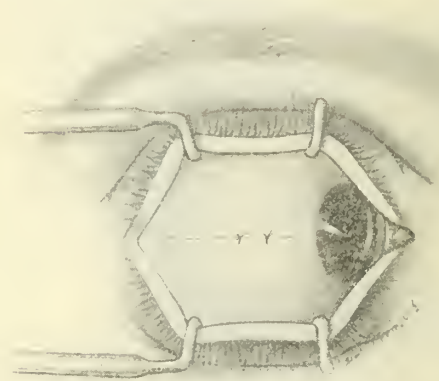


Fig. 9.

mus is under-corrected, 1% atropin solution is instilled in both eyes and the dressing re-applied. On the third day all dressings are removed, argyrol solution is instilled several times each day, and the glasses which have previously been fitted are put on to be worn constantly. The patient is usually allowed to leave the hospital on the fourth day, and



thereafter is observed every day or so. All stitches are removed on the eighth to tenth day, but argyrol solution is to be continued until the wound is healed.

It has been my endeavor to show that this method of over-lapping the rectus muscles is: (1) Different from any other muscle shortening operation yet described. (2) With the horizontal incision, when the internal recti are to be operated upon, no sinking of the caruncle is produced. (3) The most delicate muscle and tendon may be matted together when other sutures would tear out. In fact, by over-lapping the cut ends of the muscle, attenuated muscles are actually reinforced and strengthened. (4) The fan-shaped insertion of the muscle tendon to the eyeball is not disturbed; thereby avoiding the danger of imperfect muscle reattachment and possible vertical deviation. (5) It is safe as, or safer than, other methods, because no needles or sutures are passed through the episcleral tissue. (6) The amount of correction is easily governed by the amount of over-lapping. (7) It is efficient as, or more efficient than, any other method and grows in efficiency as time and cicatricial tissue forms. (8) Its simplicity.

#### CASE HISTORIES

*Case 1.* M. L., male, aged 8 years, had a convergence of  $15^\circ$ ; the left eye deviating since 2 years of age. Vision: O. D. 20/20, improved by  $+3$  D. Sph.; O. S. 6/200 with  $+3.50$  D. Sph. Operation, March 4, 1924, consisted in over-lapping external rectus of the left eye, and 13 months later eyes were parallel and cosmetically corrected.

*Case 2.* D. M., female, aged 8 years. Convergence  $15^\circ$ , the right eye converging since measles at 5 years of age. Vision: O. D. 20/100::20/50 with  $-2.50$  D. Sph.  $+5.50$  D. Cyl., axis  $90^\circ$ ; and O. S. 20/40::20/30 with  $+1$  D. Sph.  $+0.25$  D. Cyl. axis  $90^\circ$ . Operation performed Feb. 4, 1925—Over-lapping of external rectus of right eye; 11 months later eyes were parallel and cosmetically corrected.

*Case 3.* L. F., male, aged 18 years. True alternating convergent strabismus of  $30^\circ$  since 5 years of age. Vision: O. D. 20/100::20/20

W  $+5$  D. Sph.; O. S. 20/100::20/20 W  $+5$  D. Sph. On May 4, 1924, over-lapping of external rectus, left eye, with tenotomy of internal rectus left eye. The eyes were parallel following operation but on December 18, 1924, 7 months after operation, the muscle which had been over-lapped had grown in strength and there was a divergence of  $10^\circ$ . Therefore, the left internal rectus, which had been tenotomized, was over-lapped, and parallel eyes with binocular single vision was obtained.

*Case 4.* C. M., male, aged 6. Convergence  $30^\circ$ ; left eye deviating since 1 year old. Vision O. D. 20/20:: improved with  $+3$  D. Sph. O. S. 20/70::20/40 with  $+3$  D. Sph. On Dec. 19, 1925, over-lapping of external rectus of left eye. One month later  $5^\circ$  under-corrected, showing need of operating upon more than one muscle when more than  $15^\circ$  of deviation is present.

*Case 5.* P. A., female, aged 17 years. Convergence of  $15^\circ$ ; right eye deviating since whooping cough at 4 years of age. Vision O. D. 20/50::20/50 with  $+3$  D. Sph.; O. S. 20/20 improved with  $+2$  D. Sph. Over-lapping external rectus, bilateral, March 20, 1926.

Two months later  $8^\circ$  of divergence present, showing that when only  $15^\circ$  of deviation is present only 1 muscle should be subjected to operation.

#### CLINICAL MANAGEMENT OF HETEROPHORIA\*

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Since the meaning of the word—heterophoria—is “tendency to differ”, it is not surprising that we find such diverse opinions concerning its treatment. In almost no other branch of ophthalmology do we encounter so many different views on the proper management of a given condition. This variance of

\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, Section of Ophthalmology, Otology, and Rhinolaryngology, Asbury Park, June, 1931.)

opinion is partly accounted for by the failure of some persons to remember that heterophoria is a symptom—not a disease—and that the mere existence of a slight muscular imbalance does not necessarily demand treatment. In all of our work we must consider the patient rather than the phenomenon. This point has been stressed by Maddox, Duane, Bannister and many others, yet some physicians still cling to the idea that every heterophoria is a potential trouble maker and base their treatment upon that theory. In this, I am sure they are wrong, for we have all had patients with marked heterophoria who, in spite of their muscular imbalance, were free from discomfort; furthermore, I can not agree with those who can only remember these asymptomatic cases, for heterophoria is an important cause of asthenopia.

Therefore, with such a variable symptomatology, the treatment of heterophoria must be individual, and the first thing to be decided is—whether or not the symptoms are being produced by the muscular imbalance. The co-existence of ametropia and heterophoria is quite common and often correction of the refractive error is all that is necessary; however, in other cases no relief follows such treatment and our attention must be directed to the heterophoria. A careful history will often elicit much information that is helpful in determining the exact relationship between the heterophoria and the symptoms. For example, the panoramic headache described by Bennett is very frequently found in divergence insufficiency and other forms of heterophoria, yet is quite rare in ametropia. Confusion of vision with both eyes open yet clear with either one separately is very suggestive of heterophoria. Reflex symptoms, especially of the gastric type, are also more prone to occur with muscular imbalances than with errors of refraction. The prevalence of “head-tilting” in hyperphoria is so well known that mention need only be made of the ease with which a large amount of vertical deviation can be masked by this maneuver. By carefully considering these and other equally well known facts one is usually able to decide upon the cause of the symptoms.

While a good history is important, an ac-

curate diagnosis of the exact nature of the heterophoria is even more necessary for the intelligent handling of these cases. For example, it is not sufficient to know that a patient shows a certain amount of heterophoria in distant vision, without any knowledge of how this deviation behaves at the near range or in different directions of gaze. Duane, in one of his last articles, said: “Such data, however accurate, is altogether insufficient for a proper understanding of the nature of the case or for the application of suitable treatment. The deviation found is but a symptom, and to treat it as a substantive affection, without determining the conditions that underlie it, would seem as strange a thing as for a physician these days to treat a case of dropsy simply as dropsy without seeking for its cause.” Since the truth of this statement can not be denied, it behooves us to know not only that the symptoms are due to the heterophoria but also how to make an accurate diagnosis of the underlying factors producing the deviation. For the latter, we must know what information is needed and the best methods of obtaining it. Duane, in 1913, pointed out that for the purpose of diagnosis the following information was sufficient: (1) The amount of deviation for distance; (2) prism divergence for distance; (3) amount of deviation for near; (4) near point of convergence. There are many methods for determining the muscular balance, and it is not possible to discuss the relative merits of all of them. Suffice it to say that, in my hands, the screen and parallax test of Duane is the test *par excellence* for measurement of pathologic deviations, while the Maddox rod and the phorometer are useful for detecting slight amounts of hyperphoria, and for rapid exclusion of normal cases. The least valuable of these findings is the prism divergence. If there is any anomaly of divergence it should be suspected from the distance findings, so this test acts only as a check on the test for lateral imbalance at 20 feet. A careful estimation of the near point of convergence gives us our most valuable information on the ability to converge, and constitutes our most important test at the near range. It is hardly necessary to mention that the correcting lenses should be



worn during this examination and if presbyopia exists it should be corrected when the tests are made at near range. To these routine tests various others can be added according to indications. The most frequently needed additional information is the exact amount of deviation present in the 6 cardinal directions of gaze, which is most satisfactorily determined by the screen and parallax test and is particularly necessary in hyperphoria or whenever there is any suspicion that the deviation is of parietic origin. These tests have determined whether the deviation is greater for distance or for near, or vice versa, and also have established whether it is comitant or non-comitant. The object in using them is to enable one to make a correct diagnosis of the underlying causative factors of the heterophoria without which proper treatment is impossible. Consideration of the treatment of different types of heterophoria will prove the necessity for such a routine and also show the rationale of the methods employed.

#### EXOPHORIA

The vast majority of exophorias are caused by either a divergence excess or a convergence insufficiency, or to a combination of these conditions. A pure case of divergence excess presents the following findings: (1) Marked exophoria for distance; (2) excessive prism divergence; (3) normal muscle balance at 15 inches; (4) normal near point of convergence.

When such a condition prevails, treatment is vastly different from that of convergence insufficiency, for we know that divergence excess is not refractive in origin, that prismatic correction is rarely successful, and that no permanent cure will follow prismatic exercises. Its treatment is, therefore, purely surgical and should consist in weakening the power to diverge; satisfactorily accomplished by a complete tenotomy (or recession) of one or both external rectus muscles, depending upon the amount of deviation. So long as the power of convergence is normal, I see no reason for shortening the internal rectus.

In a pure case of convergence insufficiency we find the following: (1) Normal muscle balance at 20 feet; (2) normal prism divergence; (3) marked exophoria at 15 inches;

(4) remote near point of convergence. With such findings the diagnosis of convergence insufficiency is evident and treatment must be directed at building up this power rather than at weakening the ability to diverge.

The varied etiology of this condition makes its treatment much more complex than that for divergence excess. Convergence insufficiency may be of accommodative or non-accommodative origin. Careful estimation of the refraction will determine this point and is the first step in treatment. An uncorrected myopia accounts for a certain percentage of them but it is also encountered in corrected presbyopes and hyperopes who, when they put on convex glasses, find themselves enabled to read without exerting their usual quantum of accommodation and, as they let their accommodation relax, will also relax their convergence. Closely akin to the accommodative type, is the so-called visual form which arises as the result of a marked inequality in the vision of the two eyes, or as the result of an insurmountable vertical diplopia. The presence of a small amount of hyperphoria is a frequent finding in convergence insufficiency, and its correction constitutes a most important part of the treatment. I can not stress too strongly the importance of correcting any existing hyperphoria before considering the lateral deviation, for often this treatment is all that is necessary.

According to Duane, approximately 60% of our cases of primary convergence insufficiency are nonaccommodative in origin. Proper refraction is, therefore, of no benefit to patients of this group. He lists the causes, in this group, as: (a) "conditions causing general nervous or systemic depression (neurasthenia, hysteria, anemia, convalescence from exhausting illness and the like); (b) nasal obstruction (quite common); (c) some unknown cause acting upon persons whose muscular power and coördination otherwise seem normal". It is important for us to remember that a weakness of convergence is often just an indication of the patient's general condition, and that attention to the general health constitutes the rational treatment. When we have eliminated cases due to improper refraction and to impaired general health, we still have

left a considerable number of healthy individuals who are incapacitated for near work on account of a subnormal converging power. It is in this class that prismatic exercises are of value. Duane and others have laid down precise rules for such exercises so it is not necessary to repeat them. The method used is not so important as the manner in which they are given. To be of any value the instructions must be exact in every detail. The patient must feel his own responsibility for the proper execution of these exercises. This he can not do if they are given in a careless, desultory manner.

I agree with Duane that "the use of prisms, base in, to correct the deviation is a procedure to be condemned, for while they may afford temporary relief it has seemed to me that in most cases such prisms ultimately increase the deviation and the symptoms". If these patients come to operation, the method of choice is a shortening of the internal rectus of one or both eyes and not a tenotomy of the external rectus.

Not an infrequent finding is an exophoria of equal amount for distance and for near with an excessive prism divergence and a remote near point of convergence. In other words, there is both a divergence excess and a convergence insufficiency. This tendency for periodic deviations to become continuous is well known and results from nature's efforts to make the deviation less troublesome; therefore, a deviation equal in amount for distance and for near is usually one of long standing. The proper treatment then must take into consideration both etiologic factors. Whenever it is possible, we should determine the primary cause and first direct our treatment at it, but often times the secondary manifestation is so pronounced that it also demands treatment; in which case, simultaneous removal of both is advisable.

#### ESOPHORIA

Similarly, most esophorias can be said to result either from a divergence insufficiency on a convergence excess, or a combination of these conditions. An insufficiency of divergence is characterized by: (1) High degree of esophoria for distance; (2) subnormal

prism divergence; (3) normal muscular balance at 15 inches; (4) normal near point of convergence.

Divergence insufficiency is of non-refractive origin and while not so common as divergence excess the small degrees are more productive of discomfort than are the slight overactivities of this power. The use of prisms base out for distant wear is, therefore, occasionally helpful; however, if they are used constantly a secondary convergence excess intervenes, making it necessary to strengthen them at frequent intervals. The larger errors can only be satisfactorily corrected by operation; which should be a shortening of one or both external rectus muscles.

Primary convergence excess, the commonest cause of esophoria, presents these findings: (1) Normal muscular balance for distance; (2) normal prism divergence; (3) high degree of esophoria at 15 inches; (4) excessively close near point of convergence.

This condition is usually accommodative in origin but may be present without sufficient refractive error to account for it. These rare non-accommodative cases are occasionally due to hysteria or to some irritative condition producing spasm in general, but usually the cause remains unknown. The relationship between accommodation and convergence is so well understood that it is useless to dwell upon the necessity for refraction under a cycloplegic in this class of cases. Proper refraction corrects most of the convergence excesses unless they are sufficiently marked to warrant surgery, in which case the operation of choice would be a recession of an internal rectus. The combined condition of divergence insufficiency and convergence excess is frequently encountered and the proper treatment must take into consideration both conditions.

#### HYPERPHORIA

The prismatic correction of small amounts of hyperphoria is almost universally approved, and is entirely satisfactory in most cases. However, before ordering prisms, it is important to be certain of the presence of vertical deviation in the lower fields, for the vast majority of hyperphorias are of parietic origin and do vary in the different directions of gaze.



The routine measurement of the amount of vertical deviation in the 6 cardinal directions of gaze will convince one of the truth of this statement and will explain some of the failures. While the smaller errors are usually more nearly comitant than the larger ones, it is not uncommon to find rather wide variations in those of small amount.

When the condition is beyond the realms of prismatic correction, operation must be considered; in which case an accurate determination of the muscle or muscles involved is absolutely essential. It is not possible to consider at this time the indications for the various operative procedures used in hyperphoria, so, suffice it to say that surgical treatment demands a thorough knowledge of the underlying cause of the vertical deviation, and, the choice of operation will depend upon which of the elevators or the depressors are at fault.

### COMBINED ORTHOPTIC AND OPERATIVE TREATMENT OF CONVERGENT SQUINT IN YOUNG CHILDREN\*

LINN EMERSON, M. D., F.A.C.S.,  
Orange, N. J.

When I was studying in the Manhattan Eye and Ear Hospital, in 1901, the treatment of convergent squint consisted in first fitting glasses to the patient and, after observing the effect for a short time, the performance of some one of the various operations used for correction of the deformity. Many parents refused consent to the operation, when told that the vision of the squinting eye would not be improved. Others had been told by their family doctor that the child would "outgrow the squint", and even today the same sort of advice is often given. Some of these patients were cured by glasses alone, just as a certain few did outgrow their squint when left untreated.

Panas' operation of stretching, and com-

pletely severing both internal recti, had been introduced by the late Dr. D. B. St. John Roosa, and its performance was of daily occurrence. The occasional marked divergence following this procedure was frequently of such late onset that at first its danger was not appreciated.

Claude Worth's book on "Squint" had just been published, but as his English confrères received his ideas with ill concealed skepticism, it was not surprising that it received scant attention in this country. After reading this book, I became an enthusiastic convert, and at once began treating the patients assigned to me along the lines advocated. My results were so satisfactory that within 2 years my chiefs, Drs. Van Fleet and Lewis, agreed to assign to me all our convergent squint cases, that we might see what could be accomplished by orthoptic treatment, before attempting any operative procedure. I soon had more than 200 under treatment, and the work became so onerous that I was obliged to weed out the unfavorable and non-coöperative patients.

Dr. Nelson M. Black, of Milwaukee, was the leading exponent in this country of Worth's method of treatment, and it was due to many of his ingenious devices and suggestions that I was able to elaborate and improve Worth's plan of treatment. His method is now so well understood that only casual mention need be made of the fitting of the glasses objectively; occlusion of the fixing eye; blurring of the fixing eye's vision with atropin (later its use in both eyes in certain cases); and the giving of bifocal glasses for these atropinized eyes. The various methods of training markedly amblyopic eyes; use of the stereoscope with the pictures by Kroll and Wells; plastograms of Bauermeister, of Glasgow; and the amblyoscope with the vertical adjustment, ingenious illuminating device, and pictures by Dr. Black, are all used to assist and develop the various grades of fusion. Worth divides fusion into first, second and third grades, but, as I said in a former paper, there are really "57" varieties or grades of fusion.

After  $3\frac{1}{2}$  years of intensive work, I presented before the Ophthalmic Section of the

\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, at Asbury Park, June 3, 1931.)

New York Academy of Medicine a paper entitled "Some Observations on Worth's Method of Treatment of Convergent Squint in Young Children, with Presentation of Cases", which was published in *Ophthalmology*, July, 1906, and I shall today repeat some of the things then said.

The etiology of convergent squint was but little understood until the appearance of Donder's classic work, in 1864, and his clear elucidation of the causal relation of hyperopia and hyperopic astigmatism has never been successfully controverted. The strongest argument of those who oppose Donder's theory has been the fact that the majority of hyperopes do not become squinters. The investigations and observations made by Worth seem to have, at last, very thoroughly cleared up the etiology of squint. While detracting from Donder's epoch-making discovery in no way whatsoever, and conceding the causal relation of hyperopia and hyperopic astigmatism, he insists properly that the reason why so many hyperopes do not develop squint, is because they possess a well developed fusion faculty or fusion sense, and that in squinters this fusion faculty is deficient or absent. How near Landolt came to striking the keynote nearly 20 years ago, is evident from the following paragraph from page 359 of Culver's translation (1885): "Even in cases of concomitant strabismus of rapid development, spontaneous diplopia is lacking. But we must not conclude from this, that young hyperopes attach so little value to binocular vision, that they renounce it forever on the slightest and even transient occasion. On the contrary, the great number of hyperopes who do not squint, and who, nevertheless, have passed through the same incidents, have resisted the temptation and been saved from strabismus by the stability of their binocular vision. It must be admitted that there is with the majority of those who squint a predisposition to strabismus, with whose exact nature we are not yet entirely acquainted."

Valk, who is an opposer of Donder's and Worth's theories, paraphrases Lincoln's celebrated saying: "Some of the cases may have one cause, one cause may cover some of the cases, but we must find one cause that will

cover all of the cases." He further affirms there must be "one true and prime cause of strabismus". He does not seem to appreciate the fact that deficiency or absence of the fusion sense is that "one true and prime cause". There has never existed a single case of concomitant convergent squint in which the fusion sense was not deficient or absent. This also applies to all other varieties of constant squint except the paralytic.

Failure to appreciate the importance of the fusion sense causes many authorities to classify heterophoria as latent squint. Only in certain rare instances does the heterophoric become a squinter, and the various reflex symptoms which we see in heterophorias are due to their fully developed fusion sense, which precludes the possibility of squinting without diplopia manifesting itself. Where a patient with esophoria has *occasional* squint, diplopia is nearly always present. If the squint becomes *periodic* and diplopia disappears, it signifies some deficiency of the fusion sense, and if left untreated will pass on to *constant* squint, and the fusion sense from disuse will become more deficient.

While there is but "one true and prime cause" of concomitant convergent strabismus, there are, no doubt, many predisposing causes, such as: (1) Hyperopia and hyperopic astigmatism. (2) Anisometropia. (3) Specific fevers, especially in whooping-cough, measles, diphtheria, etc. (4) Violent mental disturbances (frights or fits). (5) Injury during birth. (6) Heredity. (7) Congenital defects. In the last mentioned class should be placed cases of congenital amblyopia, if there is such a thing.

In my paper, I stated: "The more patients I see the more I am convinced that treatment should be instituted before the fourth year, as most of these patients seen between the second and fourth year yield rapidly to treatment; those seen early in life, who have squinted but a short time, are almost invariably cured in a few weeks or months. It would seem that Worth's claims are modest and that with improved technic from 75% to 90% of patients with convergent squint, under 5 years of age, can be cured by methods other than operative."



I was much disappointed at the polite skepticism with which my paper was received. One Manhattan eye surgeon said, in the discussion, that since it was not possible that a squinter with a vision of 20/100 could be cured and have 20/20 vision in each eye, I must have been mistaken in my observations as to his original amblyopia. Since I presented several such cured patients, my results could not be questioned, so the inference was that I was inaccurate or dishonest as to the original condition of some patients.

Being somewhat piqued, I wrote nothing further on the subject for more than 10 years, but actively continuing the treatment of such patients along the lines advocated, I had the opportunity of treating more than 1000 cases in the ensuing 12 years. In a symposium on squint, at the Academy last February, practically every idea expressed in my paper of 25 years ago was accepted as a matter of fact, without any adverse discussion. In 1911, the late Dr. Wendell Reber, who had become an ardent advocate of this plan of treatment, rediscovered the value of bifocal glasses in treating squint patients who were being continuously atropinized, and wrote a paper urging their use. When I called his attention to the fact that I had been using them for nearly 10 years, and referred him to my earlier paper, he hastened to acknowledge my priority.

While there is no doubt that at least 90% of such patients could, theoretically, be cured by nonsurgical methods, as a matter of fact less than 50% can, practically, be cured, because of unfavorable circumstances. Owing to neglect, or bad advice, at least half of them do not come under observation until they are more than 4 years old. In our various hospital clinics, few men have the time or inclination to give them intensive treatment. Cooperation of parents, often due to lack of adequate means, is frequently half-hearted or entirely absent. I am, therefore, now limiting use of this plan of treatment to patients seen early, and where satisfactory cooperation can be secured. I very soon became convinced that complete tenotomy of the internal rectus muscles was an unsound routine procedure;

and I earned the cordial dislike of Dr. Roosa through my criticism of Panas' operation.

During my Manhattan days, I performed the advancement operation of Landolt, as modified by Drs. Wootton and J. J. Thomson, but seldom recommended it before any patient's tenth year. Any advancement operation in which scleral sutures are used is a rather formidable procedure. General anesthesia is required, the patient must be hospitalized, and both eyes kept bandaged from 10 to 14 days. As loss of an eye from infection has occurred, one hesitates to assure parents there is positively no danger to the eye in such an operation; as such a disaster might result in a suit for heavy damages.

In an attempt to secure results by an easier way, I devised what I called the *split tendon operation*, and described it at the American Medical Association meeting at St. Louis in 1912. Imagine my surprise and chagrin when Dr. Edward Jackson informed me that this operation had been performed and described by Valude about 4 years before I began the study of medicine. I soon found, however, as no doubt did Valude, that it was unsatisfactory, and, consequently, went back to Wootton's operation.

The idea of combining the operative with the orthoptic plan of treatment came to me several years ago as the result of an operation on a small child, who was making little progress, and whose family demanded an operation. After the operation, which but partially corrected the squint, I was astonished to find that under continued orthoptic treatment he rapidly acquired fusion and went on to a complete cure. Impressed with this fact, I guardedly began operating on other unsatisfactory cases, and was rewarded by seeing many other equally good results. Since complete correction of the deviation by operation was not necessary, it occurred to me that much simpler operations could be performed, so I began doing recession operations and tendon tucking on small children, following these operations with continued orthoptic treatment.

As a result, I now seldom find it necessary to do more than recession operations with

Lowell's clamp, or tucking operations with Harrison's tucker. These 2 operations were demonstrated on a mannikin by Dr. Allen Greenwood, of Boston, at the instructional course of the American Academy some 3 or 4 years ago. In following this plan of treatment we have in reserve 4 operations which may be performed, one at a time, and progress of the orthoptic treatment observed. Many people refuse point blank to have any operation on the *good* eye. After seeing the improvement which follows a recession operation on the squinting eye, it is generally easy to secure consent for the same operation upon the other eye. I do the tucking operation only when sufficient correction is not secured by the recession operations. The recession operation of Jamieson gives the greatest, and most accurate, results but, as I before stated, any operation in which scleral sutures are used is much more formidable than the simple recession and tucking operations, which are not necessarily hospital procedures, and as no bandaging is necessary, the use of butyn-suprarenalin drops permits leaving both eyes uncovered and there is no interruption of the orthoptic treatment.

In the treatment of convergent squint, from earliest infancy to adult life, no hard and fast rule can be followed. The intelligence, co-operation, and wishes of the patient and the family must all be given due consideration. Some men go so far as to say that a complete tenotomy should never be performed; but, some of my most satisfactory results have been from complete subconjunctival tenotomies on young adults who wished a cosmetic result and were unwilling to give up any time from their usual occupations.

#### DISCUSSION

*Dr. George F. Sullivan* (Hoboken): Dr. Hubbard has devised a new operation and the feature that impressed me most was the fact that there were no scleral sutures. You know the difficulty we have to introduce scleral sutures and get them to hold, and also the potential danger of causing infection.

In all of these discussions, there are 2 things that stand out; first, binocular fusion; second, cosmetic results. A large number of people are interested only in the cosmetic effect and whether they will be able to dispense with glasses after the operation has been done. It has been my experience that even with the most intelligent families coöperation is lacking. When you attempt to produce fusion by the Worth amblyoscope, the Kroll

charts, or preventing use of the good and forcing use of the poor eye, you find lack of coöperation even among educated people who have the best interests of their children at heart, and it is indeed very discouraging. I think some of us here have our doubts about 70 to 90% of these children who are taken in hand under 4 years of age being able to see 20/20 even after the most careful orthoptic treatment.

Dr. Dunnington was rather modest in describing his paper as elemental. To me, it was a classical discussion of an academic subject and I think we are all gratified to have been able to hear its presentation. I was glad that he emphasized estimation of the deviation at the near point, and that he also covered divergence insufficiency and convergent excess. I have not felt any great need of using prisms in those cases. I do in hyperphoria, but my results in some of the divergencies have been very poor.

A very interesting thing, I think, was the question of amblyopia. It was discovered during the war, particularly in the Austrian Army, that a number of men who had been amblyopic since childhood had sight restored to an appreciable extent in the bad eye when loss of the good eye by injury was followed by careful exercising.

*Dr. Charles Zehnder* (Newark): I would like to ask Dr. Hubbard one thing. I noticed that before he tied his sutures he removed his clamp. How would he keep his muscles in apposition? I didn't quite grasp that part of the operation.

*Dr. Elias J. Marsh* (Paterson): I would just like to ask Dr. Hubbard if he finds any advantage in scarifying the surfaces of the muscles?

*Dr. C. Littwin* (Englewood): I just want to say a few words with reference to the orthoptic treatment which Dr. Emerson has so very ably discussed. Dr. Sullivan said that he doubts whether 75 to 90% of the cases are improved. I haven't had an awful lot of experience, but I rather think it isn't so much the lack of coöperation on the patient's part as the lack of patience on the doctor's part.

We have, at St. Luke's Hospital in New York, a department where we do nothing but exercise; that is, we have a class of these convergent strabismus patients. We have trained several lay-workers, volunteers, to do the exercises for us. It is remarkable how successful they are, because it doesn't require so much the coöperation of the patients as patience of the person conducting the exercises.

*Dr. Elbert S. Sherman* (Newark): One remark of Dr. Emerson's excited my curiosity. He referred to the danger of scleral sutures and then—I can't quite quote him exactly—said that he used the recession operation.

*Dr. Emerson*: That is the operation of cutting the muscle in 3 places; almost a complete tenotomy.

*Dr. Sherman*: That is not now known as the recession operation.

*Dr. Emerson*: No, but it is a recession operation, nevertheless.

*Dr. Harry V. Hubbard* (Plainfield): Dr. Dunnington speaks of the vertical deviation not being corrected until after the lateral deviation, that



is, with prisms or prism exercises. In my experience, to obtain best results the quickest, a vertical deviation must be corrected first, because no patient can handle a vertical deviation without trouble. A patient can handle a lateral deviation of a certain amount without serious trouble, he may have a moderate amount of symptoms, but no great amount of vertical deviation can be handled without a great deal of discomfort.

I remember years ago when I was at the Post-Graduate Hospital and Dr. Woodward was the Chief of Service, I was talking with him one day and said—"Do you think these prism exercises are of any value, or are they a money-making scheme?" He said—"They are of value." Those of you who ever knew Dr. Woodward will agree, I believe, that he was a very high caliber ophthalmologist.

I have used the prism exercises myself on patients at the office, but I am not in favor of giving prisms to patients to take home. I believe 2 or 3 exercises a week, working these prisms up, putting them on accurately, are of great value and I have found that they hold this correction.

You can strengthen these muscles of the eye the same as you can strengthen an athlete's muscle in any part of the body. I believe it is of great value.

I also, contrary to Dr. Dunnington's suggestion, have prescribed glasses with prisms *base in*, to correct an exophoria. What are you going to do with a patient who is having symptoms? Some of them will not permit operation. Prescribing prisms is about the only means left, it seems to me, and in my experience I have seen some rather good results from the use of a small prism, say from 1° to 3° for I have learned not to put on too much, but 1° prism over one or both eyes will often relieve greatly, even if patient has 4° or 5° of deviation, I would not put on prism enough to correct it fully, I would make the muscle work, too.

I want to thank the gentlemen for discussion of my paper, and I want to repeat that the danger of injury to deep structures with episcleral sutures is one of the strongest reasons for electing this operation that I have described. There is absolutely no danger, because there are no sutures put into the episclera. Dr. Littwin asked about holding the muscle before the stitches were tied. After the stitches are tightened, pulled up, in overlapping the muscle, it will not slip back enough to do any harm, or if desired, the forceps may be left on the muscle until the distal suture is completed through the conjunctiva and tied.

I have not tried scarifying the muscle before it is over-lapped, because I have found no reason for it.

Dr. John H. Dunnington (New York City): I am sorry that I didn't make myself quite clear. I agree with Dr. Hubbard absolutely, that the vertical deviation should be always corrected first. I meant to say that, if I didn't. It is very important, I think, to remove a small amount of hyperphoria, particularly when it is associated with convergence insufficiency, because the patient cannot converge if there is a slight vertical deviation. Oftentimes a removal of this hyperphoria is all that is necessary.

I cannot, however, quite subscribe to Dr. Hubbard's views on the value of office prism exercises. My results have been largely obtained by the home use of them, carefully supervised.

I also did not mean to say that there never could be a case in which you would be justified in

prescribing prisms *base in* to correct exophoria. I can imagine such an emergency arising but, on the other hand, I am positive that it is largely of temporary value and as time passes you will be called upon repeatedly to increase the strength of the prism.

I remember once hearing Dr. Duane say he had only given prisms *base in* 3 times and taken those off twice. I must confess that I have been swayed a little bit by his enormous experience. On the other hand, if a patient comes in, who has worn prisms *base in* for years, I am not so foolhardy as to remove them, although there may be no indication for them. He has gotten accustomed to them, and I think it is better to leave them alone.

Dr. Linn Emerson (Orange): In regard to what Dr. Hubbard just said, and Dr. Dunnington has corroborated, I feel the same, that the vertical deviation must be corrected first. I have found many cases of moderate hyperphoria, 1° or 2°, with quite marked horizontal deviation, the patient wearing vertical prisms, and I have taken his muscle balance a week later and found the horizontal deviation had disappeared. Correcting the vertical deviation has brought that about.

I am just the reverse on the question of prisms. I have practically abandoned the use of prism exercises. As Dr. Hubbard has said, you can strengthen those muscles just as an athlete can strengthen his muscles, but put a man in a gymnasium for 3 or 4 months and he is a husky fellow and he can do things, but just as soon as he quits his exercises, then he reverts to his former condition. It is like

The devil was sick, the devil a saint would be;  
The devil got well, and the devil a saint was he.

I find patients, to whom I gave prism exercises, are benefited for a short time and then they come back with recurrence of the symptoms and I find they have abandoned their prism exercises.

I have many patients wearing prisms *base in* with satisfaction. Many have been wearing prisms for 20-25 years, and just as we have latent exophoria, so we have latent hyperphoria and latent astigmatism, and a certain percentage of those patients come back after 2 to 4 years with a larger amount of exophoria and the prisms must be increased. You can't give them much more than 2° or a maximum of 4° prism *base in* that they can wear with comfort because it gives them color distortion. Then they must have an operation. But when you have a patient with a refractive error who must needs wear glasses anyhow, why subject that patient to a muscle operation which you cannot graduate, and which you cannot be absolutely certain is going to give him results, when by the interposition in his glasses of prisms 1, 2 or 3° *base in*, he is going to wear the glasses and wear them with comfort and satisfaction for years and years and have perfect relief.

I say, as I said before, that I am certain I have got more than a thousand patients wearing prisms *base in* with comfort and satisfaction,  $\frac{3}{4}$  or  $\frac{7}{8}$  of whom have come back to me year after year, over a period of many years, with no increase of exophoria. Consequently, I am a very strong advocate. Dr. Wendell Reber was also a strong advocate, and in his particular case the proof of the pudding was in the eating. Dr. Reber was a hyperphoric and an exophoric and he wore prisms both vertical and horizontal, and he was completely relieved. He and I have talked this matter over several times. When, by carefully correcting the refraction and correcting fully the vertical de-

viation, and partially, as Dr. Hubbard said, the horizontal deviation, with prisms, you can give them perfect comfort and have them wear their glasses with satisfaction, why talk operation? I feel that every man practicing medicine ought to put himself in the patient's place. Any procedure which you cannot recommend for yourself or a member of your own family, you haven't any business to recommend to your patient. If I had hyperphoria and exophoria and could wear glasses with prisms in them, and be made comfortable, I assure you I would not have any muscle operation.

Dr. Sherman's criticism of my designation of this operation, I suppose is correct, although the word "recession" means to set back; it doesn't necessarily mean to cut it off, so the word "recession" could be used to describe that operation, although the words "recession operation" have been used of late to designate an operation in which the muscle is completely severed and reattached to the sclera further back by sutures, but an operation which is almost a complete tenotomy is really a recession operation after all.

I fear Dr. Sullivan read my paper wrong when he said he didn't think 75 to 90% could have 20/20 vision. I didn't make any such statement as that, at all. I said 75-90% of patients with convergent squint can be cured by methods other than operation. Curing convergent squint doesn't mean giving them 20/20 vision. Many of those patients have such a high degree of astigmatism that even though they had never had any squint at all, or any amblyopia, they wouldn't have 20/20 vision. As a matter of fact, I don't believe more than 15-20% of cases of convergent squint with amblyopia can be restored to 20/20 vision, although I have a large number of patients who were markedly amblyopic and now have 20/20 vision, but I have a still larger number whose vision when I first began treating them was 20/200 or 20/100, who are now reading 20/70 and on to 20/30. They are all improved.

Relative to the question of the amblyopic eye having its vision restored after loss of the other eye, there is no question about that. So far as I know, up to a few years ago there were 3 cases reported in the literature, one of which was my own. Dr. Walter B. Johnson, of Paterson, reported, some 25-30 years ago, a case in which an individual was amblyopic, and he lost his good eye, and his vision was restored in his amblyopic eye. All of us, no doubt, have heard of such cases, but, unfortunately, we have not any record of their earlier vision, so we can not say with absolute certainty that the patient had poor vision in one eye and lost his good eye and then his vision came up in the other.

I was fortunate in having a history in the case I reported about 15 years ago. The boy came under my observation when he was 9 years old. He had about 20/70 or 20/100 vision. I treated him and he was cured of his squint, but he was not cured of his amblyopia. One Fourth of July this boy put a firecracker in a bottle and the result was that he got a very bad laceration of the cornea in his good eye and a prolapse of the iris and traumatic cataract. The family was terribly upset because he got his good eye hurt, having very poor vision in his other eye. While he was under treatment, about 3 weeks after the accident, his mother came, in great excitement one morning, and informed me that Willie could see very much better in his amblyopic eye. I took his vision and I think it was 20/40, and within 6 months that boy, whose injured eye developed a cataract and had to be operated upon, also developed 20/20 normal vision in his amblyopic eye.

## PEDOGRAPHIC IMPRESSIONS IN SCHOOL CHILDREN\*

DONALD B. HULL, M.D.,

Ridgewood, N. J.

The school physician primarily concerns himself with those conditions in the pupils which may lead to fatigue, inefficiency and disease. I shall describe a method of examination often neglected, namely, the arches of the feet by means of graphic foot impressions.

There are 4 ways of examining arches. One method employs a staining solution, such as picric acid, or printer's ink. The foot is dipped in this and then an impression made on paper. That night, mother tries to wash the feet and doesn't think so highly of this method. Commonly, in the office, the physician attempts to pass a tongue depressor under the foot to judge the arch—an inaccurate means, and leaving no way to measure improvement in defective conditions. Dr. Scholl, the New York chiropodist, has devised a pedograph that works well. It consists of a rubber diaphragm, inked on the under surface, which is pulled over a sheet of paper and is stepped upon, leaving a neat impression.

Using the same principle, I have made a simpler pedograph, easy to construct and quicker to handle. A strip of printer's felt 10 x 14 in., obtained at the local press, was stretched tightly over a board. A strip of twill, or light canvas, was stretched over this and the whole allowed to soak up several ounces of printer's ink. The pad was then placed in a box which had a lid and handle, making it convenient to carry without soiling one's clothes. In use, a sheet of cheap paper is placed on the pad and the child told to step on it, walking directly across in a natural manner. He turns and walks across again, using the other foot. The impression left will be clear and permanent. Two nurses can examine 200 pupils in an hour. Each paper is to have the child's name and grade on it. The impressions are judged at any later time by

\*(Read at the 165th Annual Meeting of the Medical Society of New Jersey, Section on School Medicine, Asbury Park, June 3, 1931.)



the school physician, and the defective ones are filed away for future reference as to improvement. My method of viewing these is to draw a line from the second toe to the heel, and to note the area of impression that overlaps to the medial side. Some authorities attempt to classify feet on a 4+ scale as to flatness, but if the impression is filed this is hardly necessary.

Why bother with an examination of the feet? Will anything be done about defectives? Emphatically, yes. In the Ridgewood public schools we examined 2650 students this past fall and found 149 defects, 5.6%; 106 with both feet flat, 41 with a single foot flat, and 2 cases of pinched toes. Notices were sent to parents, to be taken to the family physician, and signed after a check-up of our diagnosis and treatment had been started. Considerable favorable comment came from the parents, as well as from the physicians who benefited by a little increased business. In May, follow-up impressions were taken and 33 pupils (31%) were noted to be improved in both feet; 17 (41%) improved in a single foot; a very satisfactory showing for the first year of this work. Part of the credit is due to the corrective exercises taught by the head of the physical education department in group classes. Should the parents or the family physician desire the pedographic impression, we gladly furnish it from our files.

Three types of flat-foot must be recognized: (1) Postural flat. Forrester-Brown estimates that 60-80% of the children in England suffer this type. Knock-knee and other postural defects are always associated with it.

(2) Rigid flat. Where there is actual boney, irreparable deformity.

(3) Congenital flat. Apparently nothing corrective can be accomplished with the last type after 5-6 years. At the Paterson General Hospital where complete foot imprints are taken of all new-borns, for identification purposes, I am impressed with the large number of congenitally flat feet observed.

Hoffman concluded, after examining 1100 negroes and whites at the World's Fair in St. Louis, that there is no normal arch, that the height and shape of the arch are of no

value in estimating the strength or usefulness of the foot, and that normal feet present high, medium and low arches in nearly the same proportion as do feet with weakened arches. Our results in Ridgewood do not agree with this. We find that, with a few exceptions, the pupils with poor impressions complain of some one of the symptoms of flat-foot: there may be pain and tenderness under the tuberosity of the scaphoid; feet feel hot; are uncomfortable; burn and perspire; there is general and local stiffness in the morning with local swelling at night; a tendency to walk with the feet everted; tender heel and back-ache, together with pains up the back of the legs; or a general feeling of tiredness and disinclination to play active games. In school examination work, the physician need not concern himself with symptoms, but whoever is attempting to correct the defect should be aware of the symptoms in order to note improvement in individual cases.

The question arises, do fat children have more of a tendency to arch defects than the average child? In our series of flat feet, 21 children (14%) are over 10% above average weight given in the table of the American Child Health Association. Some of the definitely fat, flabby children give fine arch impressions, so that I feel over-weight plays a minor part in flat-footedness. These over-weight children are more in the classification of postural flat, and usually have knock-knees with the resulting tendency to evert the foot.

In Ridgewood, the colored population is small. Not one colored child shows defective feet. However, in Englewood, with a large group of colored children, they feel there is a definite trend to flat feet among the negroes. To my knowledge, Englewood is the only other school system employing a pedograph in New Jersey; the work there being done by Dr. E. N. Huff.

The pedographic impression not only shows the defective longitudinal arch, but the transverse arch may also be judged. Callous areas show as darker spots on the record and by their position the unequal weight distribution on the ball of the foot may be determined. Obviously, callosities are abnormal and should

be reported to the parents, as well as pinched toes, so that the parents will take more care in buying properly fitting shoes. The wearing of sneakers and sandals during the summer months may have a deleterious effect on arches by not giving them proper support, but I have heard it argued the other way.

#### SUMMARY AND CONCLUSION

(1) Pedographic impressions can be made with an inexpensive piece of apparatus, if purchased, or made quite simply in the home shop.

(2) A permanent impression can be judged comparatively and filed for future reference as to degree of improvement, or can be sent to the parents and the family physician for his use.

(3) Certain conditions, chiefly congenital, must be recognized as uncorrectable.

(4) Foot abnormalities are a positive detriment to the health and activity of the school child and a menace to his health and happiness in adult life.

(5) In Ridgewood we have corrected 33% of the defective feet in the first year of this work, a result that is worth achieving and which should prove the value of pedographic impressions in other schools throughout the state.

#### DISCUSSION

*Dr. Ireland (chairman):* I am going to give you a little time for discussion of this paper.

The thought occurred to me when Dr. Hull was speaking of obesity that it would be interesting to know whether he made any studies of the feet in relation to malnutrition.

*Dr. Hull:* No, but I think that would be a good thing to study because my colleague, Dr. Vroom, has pointed out that an under-nourished bony or ligamentous system will not stand up. He would like to classify a fourth defect and that would be the arthritic type of deformity. I have not found much of that in children but I do think that if this work were applied to adults that question should be considered.

*Chairman:* We think of malnourished children as not capable of holding their bones together. The muscles, tendons, and ligaments are apt to be too weak to hold the bony arch in place.

*Dr. S. T. Snedecor (Hackensack):* I believe that Dr. Hull has begun an excellent study. I know he has done very careful work and the Ridgewood schools are having some excellent public health education for which Dr. Hull is responsible.

On the subject of posture of the feet, I am very much interested in the suggestion he has brought

out--of the relation that these deformed feet have to malnutrition and to development of the child as a whole. I should think there would be found a lot of poorly nourished children in that group, considering the proper definition of a poorly nourished child as one with a lack of subcutaneous fat and poor muscle tone, not alone under-weight; weight is not all inclusive. You will find many of these children who have not good muscle tone, which I think may account for the condition of flat feet. This is work that many of the schools should take up. At Hackensack we see the need of it, and are considering taking it up very soon.

*Chairman:* I have no doubt that Dr. Hull intends to keep at this work and the deeper he gets into it the more interested he will be and he will probably study it from all other aspects. I hope his paper will stimulate others to do work in their own school districts. We may also find a greater relationship in other types of communities than Ridgewood. I do not know but it is my impression that you would perhaps find fewer malnutrition cases in Ridgewood than in many other school districts.

*Dr. Ella Coughlan (Orange):* I would like to ask whether those cases of foot deformity are selected cases which Dr. Hull is studying, or whether they are cases picked up by the medical inspector going through the schools?

*Dr. Hull:* We took impressions of all the 6250 pupils in the school and among that number we found 649 that had those defects.

*Dr. Coughlan:* I wondered how you would arrange for these examinations?

*Dr. Hull:* We have 2 nurses in Ridgewood and they are able to take about 200 impressions in an hour.

*Dr. Coughlan:* You allow the nurse to do it?

*Dr. Hull:* Oh yes, but I read all the records personally and report to the parents.

*Question:* I would like to ask how you fix the board?

*Dr. Hull:* You will find that described in my paper.

*Dr. C. B. Warren (Bergenfield):* At a meeting of the New York State Medical Society some years ago, I heard an orthopedic inspector say that about 65% of the New York City school children were suffering from weak feet and fallen arches which had produced many constitutional symptoms, such as loss of appetite, malnutrition and anemia, and that he had corrected this condition in many cases by arch supporters, proper shoes, and foot exercises, and had brought them back to health after iron injections and tonics given by other physicians had failed.

*Dr. Harvey Brown (Freehold):* It seems to me there is a great deal of optimism concerning the work in defects of children, so much so that we are always inclined to see the doughnut and not look at the hole, as the pessimists do. I would like to make an inquiry as to what authority a school physician has to examine the feet of 6200 school children? I would like to know whether he obtained permission or whether he did it on



his own initiative? Is it not contradictory to the state law?

*Chairman:* I am inclined to believe that the state law would be liberal enough in this particular instance to permit the physician to examine the feet of school children. But I do not want you to accept that in any sense as an official statement. I would rather have the law before me, but I think it is rather liberal in its wording in that it mentions "other defects" and "other procedures" to determine the growth and development of the child.

*Dr. Donald B. Hull* (Ridgewood) (closing): We remove the children's shoes and examine them in their stockings. I tested quite a few, both with stockings on and off, and it seemed to make no difference at all so we then decided that we were justified in leaving the stockings on.

*Dr. Marcus W. Newcomb* (Brown's Mills): My interpretation has been that removal of the clothing is not permissible. How can the law be determined differently for removing the shoes and stockings from that of removing the clothing from the chest? We have no law permitting removal of the clothing from the chest to examine the heart and lungs. How can you interpret it any more liberally to permit you to remove the shoes and stockings?

*Chairman:* I suppose in the strict interpretation of the law that would be true but, on the other hand, we can require all the pupils to undress to go into gymnasium costume, so I would be inclined to think it would be quibbling as to whether it was done in a doctor's office or the gymnasium room. However, I think you may be right on the strict interpretation of the law.

*Dr. S. T. Snedecor* (Hackensack): We have 5500 children in our schools. We feel that we cannot make an adequate examination without removal of some clothing, so we have gone ahead, being careful not to antagonize or arouse criticism, and there has been practically none. We throw back the clothing of the boys to the waist so that the entire chest is bare. Practically, we can do nothing with the girls. In the high school the boys are stripped completely and examined in the gymnasium; the girls are examined in their gym suits. By going about it carefully and not arousing antagonism we have not had any trouble whatsoever.

*Question:* Then you are only examining half of the children, the boys?

*Dr. Snedecor:* We are going as far as we can and we have recently gone farther than we ever did before.

*Dr. Newcomb:* That brings us up to the question of legislation this year. I introduced a Bill to permit the physician to expose the chest of any child in the school if in the opinion of the medical inspector or examiner there was any reason to suspect that the child might have a pulmonary or cardiac affection. That Bill passed the Assembly with only 1 dissenting voice, but in the Senate a member of our own State Society got up and fought the measure, and his opposition caused it to fail of passage in the Senate. I would move that action be taken here to reintroduce that Bill.

*Chairman:* Is it not true that in general we start to do things long before we change the law?

*Dr. Newcomb:* Yes, but this Act was endorsed by the Welfare Committee and it was backed by the Commissioner of Education, and yet one of our own members helped to kill the Bill. If you can pass a resolution and send it to the Senator from Sussex County it may do some good.

*Dr. Joseph Schapiro* (Union City): Examination of the school child should be as complete and as thorough as possible. With the law as it now prevails in this state, such examination is impossible for 2 reasons: (1) The removal of clothing from the chest and examination of the bare chest is prohibited by law. (2) A yearly examination of all the pupils of a large school system cannot be made thorough unless a very much larger medical staff be employed. Usually, school systems are rather under-staffed than over-staffed. Besides, large staffs are not practicable nor feasible for economic reasons. Furthermore, annual examination of every child in the school system is not absolutely necessary. What, then, is the solution?

The practical solution would be to make examinations of certain age-groups during one year, say, the kindergarten or first grade, the third, fifth and eighth grade in the elementary schools, and the second and fourth year classes in the High Schools. On succeeding years, groups not covered in the previous year would be examined. In this manner examinations would be made once every 2 or 3 years, depending upon the size of the school system and the size of the medical staff.

*Chairman:* Dr. Schapiro is voicing a sentiment that has been expressed to me by a great many school physicians and executives throughout the state. However, I would not want to initiate action on modification of the law for the annual examination of school children on this occasion. I think there are more propitious ways of doing it. I think there will be desirable revisions in that law which we shall want to make.

*Dr. William J. Lamson* (Summit): I would like to ask whether any Boards of Education have been sued for such so-called infringement of the law? I have been a medical inspector for 21 years and have about 2700 pupils under my care. The basketball teams are given a special examination every year. Of course the nurse is always present and she removes the clothing sufficiently to make a thorough examination of the heart and lungs without any thought at all about it. The football squad is also examined in the same way.

In the routine inspection, the heart is merely listened to through the clothing and if any irregularity is noticed there is no trouble in having them remove the clothes sufficiently to make a careful examination. I would like to know whether any serious objections have been brought up?

*Chairman:* I would say that I have never heard of a Board of Education being sued but I have heard of individual objections to removing the clothing of these children. Dr. Lamson's contribution here is interesting because I personally know of quite a number of places throughout the state where they are removing clothing of the school children.

*Dr. Frederick A. Kinch* (Westfield): There are 1600 children in our Scotch Plains school system. We examine the pre-school children without clothes. The football and basketball boys are examined with as few clothes as possible, and if necessary the clothing is removed. The girls for

basketball and swimming are examined in very light clothing and often in their gymnasium suits. We have been doing this for the past 6 or 7 years, and there has been no objection on the part of scholars, parents or teachers.

## THE PHYSICIAN'S PART IN THE TRAINING OF TEACHERS\*

GRACE M. KAHR, M.D.,  
Jersey City, N. J.

To introduce my subject, what more pertinent question can be asked than—*What is a teacher?*—and I wonder whether we have ever given a serious answer to this question. Do we think of her just as a person to give instruction in the 3 R's—and sometimes a little besides—or do we take in the fact that the teacher is the person who is to make the child what we desire it—prosocial—a happy and effective personality?

Educators today make this the aim of the modern school. They realize that a teacher is a kind of extension of mother and father and must be a very fine individual to substitute for *such* personages during 5 hours a day. Just as parents would not trust their children to sickly nurses, so they should want to be sure that the teacher is a thoroughly wholesome influence, physically as well as every other way. For, this 5-hour-a-day teacher has enormous influence in shaping the child's future. If he is to be made healthy, his teacher must be able to assist in that task intelligently. And where better can this task be performed? Is not the teacher's opportunity unique? Think what it mounts up to—5 hours daily for about 10 years!

After all, if we stop to realize it, a person may learn to read and write at the age 70, but no one can grow a new tooth at that age nor build a sound strong body at 30 or 40. This must be done throughout those precious formative years of childhood, those vital 10 years which can never be repeated—the results of which can never be undone.

Even while she is giving a lesson in history

or arithmetic, the teacher will carry an example of health if she is alert, erect, clear-skinned and of good color. Did not the Greeks use models as ideals of physical perfection? We should do likewise, except that our models must be living models. Will you not then think of a teacher in this way—as a model set up before your children?

I am to talk to you especially about the physician's part in the training of teachers, that is, on the subject of health in connection with the training of teachers while they are yet students in college, and the work of those same young women after they have left the Normal Schools and taken their places in rooms full of impressionable children. And, gentlemen, after my work in the State Normal School at Jersey City, I have some significant facts to present to you, facts of which I had been practically oblivious until I undertook during this past year, to look into the subject. They are facts worthy of your attention, and worthy of the attention of the parents of our school children.

It is well known, of course, that within recent years phenomenal improvement has been won in the health of babies and younger children. And I believe that if we stop to think, we all realize that the health battle was won for the little people only when the parents had been made *conscious* of the royal possibility of glowing health for babies. But babies grow up and the health knowledge of their parents peters out. In my opinion, there is little sound knowledge abroad about health after the age of 6 or 8. The youths in their teens and early twenties "just grow".

And at the age period of 16-18 girls enter normal school to learn to be teachers. In their courses they study their own minds, but many of them, I am afraid, have an inadequate knowledge of their own bodies, and they drag along with their studies, handicapped by various physical defects. It should be our business to see that these young teachers are healthy and happy. With our present system, it is possible to find frail, delicate girls struggling with turbulent classes. We may have a teacher tortured with indigestion and a consequently cranky disposition. She may be an

\* (Read at the 165th Annual Meeting of the Medical Society of New Jersey, Section of School Medicine, Asbury Park, June 3, 1931.)



unfortunate over-weight, an offense to the sight of beauty-loving children, or she may be an under-nourished nervous wreck.

The results? Ask any school official. *The teacher who is not in good physical condition is a poor disciplinarian. It is a truism to say that a healthy person emanates a glow of force. And, conversely, no teacher below par controls children by any means but nagging and threatening, which torments the nerves of youngsters.*

The healthy, calm, well-poised teacher gets order and attention and results without effort. The sick teacher works in a vicious circle. The disorder annoys her, and her nervous reaction aggravates the state of affairs. Have you, gentlemen, ever listened to the strident tones of a sick, over-tired teacher? It is not pleasant to think of the 40 tots compelled to stay for 5 hours in a closed room with such a person.

If any occupation requires robust health, it is certainly that of teaching, that unique occupation which is a composite of most others. The teacher is closed in, and so requires the mental serenity of the contemplative. She is using her brain without interruption, and so requires the mental alertness of the student. She is guiding (holding under control) a mass of active young people, and so requires the force of the group leader.

Besides demanding of teachers academic subject matter, we ask also for poise, control of emotional problems, that strange power to command a situation. We expect these things in teachers. *But when we fail to demand good health, we fail to demand these very qualities that inhere in good health.* I think most of us would agree that crankiness is due far more to some phase of ill-health than to anybody's natural disposition. Aren't healthy people usually cheerful?

What shall we do? Throw out all the teachers who fail to measure up to the ideal of grace and charm we picture? Obviously not.

It is a practical possibility to seize upon those significant 3 years which the girl spends in a teacher training school and to turn her out a normal woman, in good health and aware of her own good health, and of its value and necessity. This is my point of attack.

We want to bring it about that these girls will inevitably become health educators themselves, first by standing out as glowing examples of health; and, secondly, as intelligent observers and guides to their pupils in all matters pertaining to health.

It is not enough for teachers to know the laws of hygiene, as they are learned from books and lectures. The teacher must, so to speak, learn health by living it. It is an old principle of psychology that the best way to learn to do a thing is to do it. A boy might read a whole book on how to play baseball, but not learn so much as he would in a half hour of pitching. So, with health. The young woman who consciously lives a healthy life is the one who knows health.

Please observe that I say "consciously". The girls must realize that they are becoming healthy (and, incidentally, sometimes beautiful) because they are intelligently ridding themselves of defects, and living up to the rules of nutrition, of body function, and correct health habits. They must look upon health as a "way of living", not as an academic subject, a circumscribed matter of knowledge in a single period of a school day.

This question of the mental attitude of the teacher is really the most important of all, it seems to me. If she has no enthusiastic conviction of the desirability of radiant health, her own manner of living will quickly indicate the fact. For instance, consider the girl who insists on dieting when she is under-weight. A half-starved teacher has no pep. She must be taught to see the need of a reasonable amount of avoirdupois to supply the physical demands of her job. Once the teacher has attained to this intelligent comprehension of her own physical self, it is natural for her to carry over that knowledge minute by minute to her class. The teacher who is calm and self-controlled because she is healthy and knows it, will easily notice the abnormal nervousness of some pupils and will have knowledge of the proper sources of assistance to which she may turn. If, besides, she has a lively interest in such things as the signs of communicable diseases and their control, she will be the means of heading off many an epidemic of colds, measles, and other such

affections. Her opportunity to institute a desirable program of daily activities for health and growth is a God-sent one, provided she understands what constitutes a healthful environment for a growing child.

How shall we bring about this state of rosy health-mindedness in our teachers? Before attempting to give you my plan, I want to tell you a little story. I number among my patients a woman whose point of view is a kind of composite, as she is a college graduate, the mother of 4 children, aged now 10 to 17, the oldest in college, and she is a teacher in a public high school and engages in various outside undertakings. Her contact with high school girls and boys is very large and very close, and, in an unofficial way, she is a kind of mother to hundreds. "Do you know", she remarked to me recently, "that all the health knowledge I possess has come to me slowly through the years, in haphazard fashion?" She says that it has taken her 20 years of piecing together bits of information gleaned from various doctors to give her a comprehension of the needs of children. After college she taught for 2 years—biology, as it happened. She said: "At 20 I was teaching biology (which included hygiene) when I endured frantic headaches every week or so myself." Then she married, sublimely ignorant of health education. Operations, babies, sickness and a gradual knowledge, as kind doctors taught her everything from how to care for scarlet fever to such things as throat swabbing and corrective exercises for poor posture, have, as she says, given her a random health education. Today, she knows enough. But had she, as a college girl, consciously *learned healthful living* herself, and the rudiments of the healthy life for children, all her burdens of those 20 years would have been reduced enormously. Certainly, gentlemen, things have improved in recent years. But I think our girls have much to learn! And they are learning.

In the Normal School at Jersey City, at any rate, we are doing our part to bring it about, that when a girl becomes a teacher, she assumes her task unhandicapped by any health condition of her own and equipped with a definite working knowledge of how to help in the

health education of children. No one of our girls will acquire health experience in the haphazard fashion of my teacher-mother-patient. On the contrary, we are trying to build up an intensive health program in the Normal School at Jersey City.

Findings gleaned from the health records of the incoming freshmen reveal that there is plenty of room for improvement. Only 7 of a class of 158 were found free from demonstrable defects. These defects cover a wide range, but let me mention, for instance, those roots of so much evil, the teeth. Of the 158, 43 were greatly in need of prophylaxis, 42 had caries of marked degree, and 62 had many missing teeth, with no notion at all of the necessity for prompt replacement. This markedly poor dental condition is the more surprising when we recall the careful and painstaking dental programs in force in many public school systems. Procrastination, we know, causes much serious illness, because people *will* postpone that visit to the doctor, and we can only conclude that mother allows daughter to put off the visit to the dentist, week after week.

And consider such a matter as nutrition. We found by count that 68 of those girls were decidedly below par, and 17 were distinctly obese. For instance, 1 girl's condition called for approximately an additional 25 or 30 pounds, while another gave evidence of being actually more than 100 pounds in excess of what she should weigh.

It is not easy to persuade "slim" girls that it is desirable for them to be moderately overweight up to the age of 30. But we find that they heed our warnings against the "no breakfast" habit quite satisfactorily. They begin to understand that a well nourished person has greater resistance to disease and especially to frequent colds—this country's most prevalent affliction—that a few needed pounds means better tone to the system and therefore higher resistance.

Right here I may mention one accomplishment which pleased us not a little. You may know that in many schools there are held "cake and candy sales" as sources of class revenue. It was rather discouraging to see the girls spoil their appetites for wholesome



food by this cake and candy business, and we discussed the matter in connection with the teaching of nutrition. Much to our delight, the students themselves finally, by vote, abolished the sales. The victory in this matter I look upon as important, especially because it shows that the students are becoming health-conscious. That is the state of mind so valuable in a teacher. Health as a constructive force in life is our desideratum; we want to lead the students to appreciate and to live the healthful life.

There are difficulties, of course, in the home environment which make almost insurmountable obstacles to health for these college girls. Some can be overcome, others cannot. Long distances of travel under trying conditions; for instance, one girl spends 4 hours a day in busses. She has no time for exercise and insufficient for sleep. Some girls are wage earners. One worked in a chain store after school, having long hours and in very trying conditions. In that case, we were fortunate in being able to get her a position in the school library, where she is able to make her needed amount of money in shorter time.

In short, we endeavor to make our Health Service a vital course in conscious healthful living.

Physicians, and I mean especially the family physician, may be of great assistance in this educational work by encouraging the right type of girl to enter training school. If the physician looks upon the teacher as the model to stand before the eyes of children, he will appreciate the right sort of girl when he meets her. Then, too, the situation would be greatly improved if the family doctor could so impress prospective students with the necessity of good health, that they would have their defects corrected before entering the Normal Schools. Many defects can be removed or corrected in the period immediately preceding the girl's entrance, so that she may begin her study in as nearly normal condition as possible. Much loss of time through absence would be saved and so the girl's school career made more satisfactory both to her and to the faculty.

As well, we look to the family physician to aid and abet the school folk in encouraging

teachers, after their Normal School days are over, to establish the periodic health examination habit. Our efforts over 3 years, to make the students health minded, should result in our turning out splendid, healthy teachers. After that, their doctors can induce them to maintain such condition.

I wonder whether we often recall that the original meaning of the word *doctor* is *teacher* and that the older conception of the family physician was of one who combined with a knowledge of medicine the privilege of knowing his patients? He was often guide, counsellor, and friend. Indeed, the honor and prestige of the physician's position in our civilization came as much from the great personal influence he exercised, as from his purely professional ability.

Of course, it takes time to be interested in those under one's care, and to grasp their background and history. It takes patience, too, and other great human qualities. But it is worth while. And if we want to be a power in this world, can we think of any class of society more worthy of our interest and influence than our teachers? For every one teacher you help to keep to the healthful way of living, you are, through her, giving the chance of health to thousands of children whose lives are influenced profoundly by that teacher, through the long years of her service to the community.

#### DISCUSSION

*Chairman:* I hope the time will come when the student of the normal school will be selected by the examining physician first and the academic group secondly. This plan is already in effect in one state and on the way in others. We need it greatly here in this state. There is no question about the essential fact that Dr. Kahrs has brought out, and that is the great need for the health guidance of the normal school student and the influence upon the children she will teach.

*Dr. S. T. Snedecor (Hackensack):* I was very much interested this spring in one phase of this health education. For the first time in our schools we looked over some of these girls who were applying for admission to normal school and my associate turned 2 of them down, both of them underweight, one a thyroid case and the other highly nervous with a neurotic background. We felt that neither would turn out to be good teachers. Then we ran into lots of fun. In the first place it was asked what authority did we have to refuse them; secondly, could any one else sign those certificates? Here were 2 girls who had gone through high school, not missing a day of physical education, when they should have had rest prescribed

and more careful observation. Their sole preparation had been good marks. Physically, they could not make good teachers. I told them that if they were thinking of coming back to Hackensack we would not accept them and probably they could not get other positions as teachers. We have fallen down on the physical examination of teachers and I think that is something we must correct. There is a whole new field of work for the physician in studying the school system and its teachers.

*Chairman:* Of course this brings up facts that have not been mentioned—the expense to the state in educating these girls for teachers, and finally if they do graduate and are not healthy, have a thyroid or are under-nourished, there is the state expense largely wasted. That goes back to the fact of economics rather than the human side of it alone. It is a tremendous question and, of course, the time will come when the state will more carefully select its raw material to train for teachers.

*Dr. Snedecor:* What about the importance of that examination of the applicants by the school physician?

*Chairman:* I cannot answer that.

*Dr. Kinch:* No one can sign the certificate except the school physician. At least, that is all that is required and really there is no way a girl can be kept out of the normal school in this state if she insists upon going through. They tell us they have influence enough to stay there.

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## RECENT ADVANCES IN ACUTE POLIOMYELITIS\*

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The recent epidemic of poliomyelitis in the metropolitan area once more focuses our attention upon this interesting disease. Research workers have thrown much light on some of its phases, but it devolves upon us, as clinicians, not only to recognize the disease in its earliest stage but, by personal study and analysis of even a small series of cases, to increase the recorded clinical knowledge. The clinician has done much already; he has made the preparalytic stage a clear-cut picture and, in consequence, a larger number of cases are now being diagnosed early; and he has also begun to establish the clinical value of convalescent serum. In this paper, it is my purpose to discuss mainly recently acquired

knowledge concerning etiology, symptomatology, and treatment of this disease.

Poliomyelitis is endemic, but breaks out in epidemic form in the summer, with its peak in August, usually. More than 60% of all cases occur among children between 1 and 5 years of age. Of 500 cases in Brooklyn during the recent epidemic, 65% of the patients were children of American parents. Silverman, reporting the Syracuse epidemics of 1922 to 1929, found that Negroes were least affected; while Italians were most largely affected in proportion to the population distribution. The incubation period varies from 4 days to 2 weeks, and it is generally conceded that the disease is spread by direct contact, and by means of carriers; though the number of proved contact cases has not been large in any epidemic, and in more than 90% of the Brooklyn cases no history of contact could be elicited. Aycock reported 10 cases spread by contamination of milk. The virus is probably wide-spread, as is evidenced by the number of healthy individuals whose serum neutralizes the virus. It may be assumed that the virus invades new unimmunized areas each year, and reappears, in epidemic form, in old territories when a new population of non-immune individuals has arisen. For example, as a result of the 1916 New York epidemic, a large proportion of the population became immune, and the disease was not seen again in epidemic form until this year; but during the intervening years the disease was endemic in New York, and epidemic in other communities.

In 1909, Flexner and Lewis demonstrated the causative agent to be a filterable virus, which, as obtained from the spinal cord in fatal cases, may be used to transmit the disease from animal to animal, but it has not been possible to infect any other laboratory animal than the monkey. Attempts to actively immunize animals with attenuated virus have generally failed; according to Shaughnessy, instead of protecting the animal, repeated inoculations have seemed in some instances to render him more susceptible, and that suggests an allergic basis for the disease. Jungeblut recently subjected 27 persons, with proved previous attacks of poliomyelitis, to in-

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\* (Because of limited space, this paper has been abridged by the Editor.)



tracutaneous injection of a filtrate of heat-killed virus emulsion; and caused local urticarial reactions which he believes were allergic responses.

Poliomyelitis and encephalitis have been considered by some investigators to be due to the same causative agent. Cases suggestive of encephalitis often occur during a poliomyelitis epidemic. Both diseases are caused by a filterable virus; both are propagated by carriers; and both are localized in the central nervous system. There is good evidence, however, that the etiology of these diseases is distinct. They differ in history, in seasonal occurrence, and in age incidence; clinically, they differ in symptoms, course and sequels; experimentally, poliomyelitis is virulent for the monkey, and encephalitis for the rabbit—and there is no cross immunity.

It has also been observed that some, occasionally all, of the lymphatic structures become acutely hyperplastic in poliomyelitis; and Burrows puts the question:—"Is poliomyelitis a disease of the lymphatic system?" He believes it is, because postmortem examination may show involvement of the spleen, solitary follicles, Peyer's patches, and mesenteric or other lymph-glands; and in many cases there is no involvement of the central nervous system. He thinks the intestinal tract may be the portal of entry and that severe infection spreads to the contiguous nodes, peripheral lymph-nodes, and then to the lymphatics of the central nervous system.

*Symptomatology.* We can best appreciate the symptomatology of poliomyelitis by study of a group of cases. These, I observed in the Buffalo epidemic of 1929, and I shall present them in the approximate order in which they arose, so that the diagnostic difficulties may be appreciated.

*Case 1.* A male infant of 14 months was admitted to the Buffalo Children's Hospital, with fever, convulsions, listlessness, vomiting and strabismus. Onset of the illness was sudden. On examination, the infant was irritable, and showed a left internal strabismus and nystagmus. The next morning, a right-sided facial paralysis was apparent. The reflexes were slightly exaggerated; spinal fluid clear,

with 46 lymphocytes, and a normal sugar reduction; blood showed W. B. C. 15,000, with 65% polymorphnuclears; temperature 103°; pulse 140. The infant became comatose and died. Clinically, the diagnosis was encephalitis, but postmortem diagnosis was poliomyelitis of the bulbar type.

*Case 2.* A girl of 4 years was admitted with history of having struck her back 5 days previously, and 2 days later was unable to walk. She was sleepy and irritable, complained of pain in her head and back, cried and moaned, and suffered from anorexia. On physical examination, the temperature was 99°; pulse rate 120; rigidity of the neck; moderate opisthotonus; bilateral Kernig; absence of the right knee-jerk and abdominal reflexes; spinal fluid clear, 32 cells, positive globulin and albumin, and normal sugar reduction. The child became less irritable during the week; rigidity of the neck and opisthotonus diminished; she would sit up for a moment with aid, but would not stand; reflexes returned to normal although the Kernig tests remained positive; temperature remained normal throughout; pulse dropped to 100 in 4 days; and on discharge, the spinal fluid was normal except for a positive albumin and globulin.

*Case 3.* This patient also had a history of injury to the back, with stiffness of the back and opisthotonus. The spinal fluid was practically negative; no paralysis developed. These 2 cases are examples of the "meningitic" form of the disease, and were not diagnosed as poliomyelitis until typical cases began to come in.

*Case 4.* A girl of 8 years, who had been treated for rheumatic fever, complained of fever, headache, and pain and tenderness of the knees and legs; these were not inflamed, and the pain did not respond to salicylates. It was not until paralysis developed in the right leg that a correct diagnosis was made and the patient admitted. This patient received frequent spinal fluid drainage and serum intraspinally without any appreciable influence on the paralysis.

I saw 2 cases in the dispensary, during the course of this epidemic, which were so mild in onset that the mothers paid little attention

to the illness at that time. One girl of 12 years, who attended the syphilis clinic for intramuscular sulpharsphenamin injections, returned once to say that the injection affected her walking. On examination, a mild, flaccid paralysis in one leg was discovered. The other mother brought her child to the dispensary because of unsteadiness in gait; the child had been irritable during the week, and then became unable to walk well. I applied a posterior plaster splint and ordered the child to bed. Twice, the mother returned, carrying the splint wrapped in newspaper; the patient would not wear it nor stay in bed. Apparently, this child received the worst kind of treatment, and yet, months later, when I saw him again for some other complaint, he walked into the room normally, and no residual paralysis could be determined.

*Case 7.* A girl of 7 years suddenly became ill with headache, pain in the right side of the face and eye, and vomiting. A right facial paralysis developed, followed by inability to talk, and by regurgitation of food through the nose. The patient showed a lateral nystagmus, became comatose, and died within 2 days after onset of the illness. On postmortem, the brain was soft and hyperemic; the cord and medulla showed reddening of the gray matter; trachea was filled with food material; lungs showed a pneumonia at the periphery of the bases. This is another example of the bulbar type of poliomyelitis, which is often rapidly fatal; milder forms occur, and complete recovery from the paralysis is the rule.

*Case 8.* An example of the progressive type, ascending in character, and simulating Landry's paralysis. A boy of 10 years complained of fever, headache, vomiting, stiffness of the neck, and weakness of the legs. As the illness progressed, the legs became flaccid and the paralysis spread upward, involving the trunk, abdomen, chest, and then the arms. The following day, speech and respiration became difficult. The patient was still mentally alert, but later lapsed into coma and was dead 4 days after onset of the illness. The temperature on admission was  $101^{\circ}$ , rising later to  $104^{\circ}$ ; pulse 100 rising to 135; spinal fluid clear with 290 cells, and 96% lymphocytes.

*Case 9.* Typical example of the spinal type. A boy of 4 years became listless and feverish; next day had a sore throat and complained of pain in the back of the neck. Following this he had pain in the knees and legs, which were tender to manipulation. He also suffered from abdominal pain, and enemas were necessary to move the bowels. About 5 days after onset of the illness, he began to have difficulty in walking, due to weakness of the right leg. When seen by us, his temperature was  $100^{\circ}$ ; pulse rate 114; definite stiffness of the neck and back, with tenderness when an attempt was made to flex these passively; right knee-jerk was absent, as were the abdominal and scrotal reflexes; positive right Babinski was elicited; and the Kernig tests were slightly positive. A definite weakness was made out in the extensors of the right leg, and in the flexors of the right thigh. His gait was unsteady, and he would fall over to the right side; also unable to sit up well, falling to the right. Spinal tap showed increased pressure, an increase in cells (50 lymphocytes), no globulin, albumin positive, sugar reduction normal. The tap relieved the pressure, and the patient felt better. Next day the temperature was normal; patient brighter; the Babinski was gone. The neck and back rigidity improved from day to day. The knee-jerk on the affected side appeared feebly; on the other side exaggerated; same was true of the abdominal and scrotal reflexes—those on the affected side appearing later and more feebly. The patient suffered from distention for about a week. This case interested me particularly because of the right positive Babinski, and the abdominal distention from which the patient suffered.

*Diagnosis.* Analysis of these cases, though the number be small and the types different, is impressive. The onset of the disease is sudden; the temperature is never high, except in fulminating cases; the pulse rate is elevated out of proportion to the rise in temperature; the patient is drowsy or listless, rarely comatose, and is usually irritable when examined. Frequently, the legs are tender to manipulation, and hyperesthesia is present in other parts, notably the neck and spine. Stiffness of



the neck and back was almost universally present; considered one of our most important signs. The stiffness of the back may be elicited best by setting the patient up and having him try to bend his head to his knees. The reflexes may be exaggerated early; coarse tremors may be observed; the Kernig reaction is usually not marked.

This picture is called *preparalytic poliomyelitis*, and should be confirmed by a spinal puncture. This stage varies in duration from a few hours to about 4 days. Paralysis sets in quickly, and usually reaches its maximum in 48 hours; with it the febrile period ends. Early, a paralysis may be difficult to ascertain, but a careful search will often disclose a weakened group of muscles, or an absent reflex. One leg is most frequently involved, less so an arm or both legs; paraplegia, hemiplegia and even transverse myelitis may be simulated. The disease is characterized by its tendency to pick out single muscle groups or those related in function. In the upper extremity, the deltoid is most often involved, the hand muscles practically never. The trunk and abdominal muscles are frequently involved, but generally recover. According to Whitman: "In the lower extremity, the anterior thigh muscles are far more affected than the posterior; the anterior leg group, far more than the posterior, and the adductor muscles of the foot, more than the abductor." The cranial nerves are involved, as a rule, in epidemic cases only; the facial, most commonly; the abducens, the hypoglossal, and the oculomotor, less commonly. When the vagus or respiratory center is involved, death usually occurs.

Poliomyelitis presents a protean picture. Early it may be abdominal, respiratory, or rheumatic. The types usually described are: abortive, spinal, bulbar, meningitic, progressive, and encephalitic. A polyneuritic form has also been described, and in this form, pain in the affected nerves may persist for weeks. The ataxic form may be due merely to involvement of the white matter of the cord, and not the cerebellum.

The percentage of abortive cases in a given epidemic is impossible to estimate. An abor-

tive case may remain in the stage of a general systemic infection, with spinal fluid negative, and during an epidemic the diagnosis may be suspected but cannot be proved. The best treatment would be an intravenous or intramuscular injection of serum. When the infection has penetrated the nervous system, the signs of preparalytic poliomyelitis become manifest, and spinal fluid becomes positive. The case is also considered abortive if no paralysis develops or if this is only temporary. Our present knowledge is so limited that we can only recognize the disease after it has already invaded the nervous system; so, we can only hope, at present, to be able to recognize the onset of this stage, administer serum intravenously and intraspinally, and pray that no nervous damage of significance has yet been done.

The existence of an encephalitic form has been doubted. It was first described by Strümpell in 1885, who saw cases of spastic hemiplegia in the course of a poliomyelitis epidemic. Since then, it has been mentioned by many writers, although it has been rarely observed.

*Treatment.* Difficult as a clinical evaluation of convalescent serum is, it must be remembered that the experimental evidence in favor of its use is very strong. Flexner and Lewis, in 1910, discovered that one attack of poliomyelitis in the monkey rendered him immune to a subsequent attack. Antibodies were demonstrated in the blood capable of neutralizing the virus. Human convalescent serum had the same power. This led Netter, in 1915, to use convalescent serum in treatment of the disease in human beings. Since then, there has been much conflicting clinical evidence concerning the value of convalescent serum, but we feel that it is of value when used early in the disease. The difficulty in determining the value of serum treatment in human cases is inherent in the disease itself. As the edema which attends the inflammatory reaction subsides, recovery of function occurs whether serum has been given or not. In some cases, recovery may be complete. At present we have no way of prognosticating whether or not a given case will develop paralysis. Ay-

cock and Luther have pointed out that the careful seeking of muscular weakness in treated cases has placed in the paralytic class many of their cases considered non-paralytic, thereby lowering their figures for those that escaped paralysis. Conversely, an inaccurate muscle examination misses these weaknesses; a case is considered preparalytic; the patient receives serum, and when the muscle weakness increases and is recognized, the use of serum is deprecated.

I would like to quote two very interesting recent reports, which show why the poliomyelitis death rate and paralysis incidence rate have fallen; declines which cannot be attributed solely to serum therapy. A greater recognition of cases in the preparalytic stage, which may not go on to paralysis, tends to make for an apparent decrease in our statistics. Therefore, serum figures compared with previous epidemics are likely to be erroneous.

One report concerns the recent New York epidemic in which there were 3800 cases from January to October, with 435 deaths; a death rate of 12% compared with 27% in 1916 with 13,000 cases. A study of the cases at the Willard Parker Hospital indicates that only 17% of those recognized preparalytically developed paralysis, and this low incidence is explained by: (1) Early recognition and treatment; (2) recognition of a larger number of preparalytic cases, which formerly would have escaped notice; (3) mild character of the present outbreak.

The other report comes from the Netherlands, and reads: "The percentage mortality of poliomyelitis has greatly diminished from year to year, at least apparently; from 21% in 1928, to 7% in 1930. It should be borne in mind, however, that formerly, especially in 1928, only grave cases were recorded. In 1930, it is thought that a larger proportion of cases were recorded, and that more of the mild and abortive cases were included; so, 7% mortality is probably nearer to an accurate statement."

One more word must be said concerning convalescent serum. According to Shaughnessy, only 40% of a group of convalescent serums proved potent in a dilution 1:30. Pooled samples may be weak in virucidal

power, because of including some non-immune serums. The potency of any convalescent serum should, therefore, be determined before being used. It has been shown that 70-80% of persons, either contacts or normal individuals except infants under 2 years of age, have immune bodies in their blood, and their serums may be utilized in treatment of poliomyelitis. It has been suggested that blood donors be tested for potency, and that such persons could be held available for poliomyelitis serum, just as they are for blood transfusions. Convalescent serum may also be stored on ice for as long as 3 years without a loss of potency. Utilization of all these sources would obviate the lack of poliomyelitis serum which has been the cry in every epidemic. Convalescent immune serum has been shown to protect monkeys for about 4 or 5 days, and with large quantities of serum available, it would be possible to passively immunize more children who have been exposed to the disease.

Some of the above facts concerning convalescent serum may explain the conflicting clinical results heretofore reported, for some of the serums may have been too low in potency to do any good in the amounts given. The best route of administration has not yet been settled, but the accepted method now is to inject intravenously 50 to 100 c.c. serum, depending on the age when the patient is first seen; followed by intraspinal injections, the amount depending on the quantity of spinal fluid removed, at 24 hour intervals, until the active stage subsides.

It is still a debatable question whether serum administered intraspinally is able to reach the inflammatory lesions in the gray matter, because the flow of spinal fluid secretion is in the opposite direction, but we believe that injection of serum intraspinally, or the intravenous injection of hypertonic salt solutions, tends to break down this barrier controlled by the meninges and the choroid plexus; hypertonic salt solutions cause a dehydration of the central nervous tissues and result in an aspiration of serum from the subarachnoid space into the perivascular system, thus bathing the inflammatory lesions with serum.



# JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

Office of Publication: 14 SOUTH DAY STREET, ORANGE, N. J.

Entered at the post office at Orange, N. J., as second-class matter

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if:

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## PARLOUS TIMES

The existing period of "business depression" with its steadily increasing number of "unemployed" seems to have affected practically every type of occupation, trades, business or profession; and to have involved to some extent nearly everybody; and no single nation has a monopoly of these disturbing conditions. The practice of medicine has not been without its share of depression, and physicians probably hear more about the trials and tribulations growing out of business disturbance than any other group of citizens.

Disease, like the poor, seems destined to be with us always, and if practice has fallen off recently it is, in the main, because regular patrons are postponing operations of an elective character—requesting treatment, surgical or medical, as emergencies arise but delaying as long as possible disease prevention measures. In periods such as we are now passing through, physicians generally feel the financial stress keenly, because they are involved in various ways. When funds are being raised to care for the unemployed or those who for any reason are financially crippled, physicians are, like all other citizens appealed to, expected to contribute. When that fund is being expended, all other of those contributors from whom things are purchased for the needy—rent, light, heat, clothes and food—receive payment from the fund, save only the physicians: medical and surgical service to the sick indigents—often the most important of all things to be provided for them—

is required of physicians and they are expected to render such service without thought of payment from that community fund. Despite the fact that this is an age old custom which has grown up with the knowledge and tacit consent of the profession, it does constitute a form of double taxation.

In this connection, there is an old proverb which deserves some consideration by physicians; i. e., "charity begins at home". Just a few days ago, we received from the President of the State Society, Dr. John F. Hagerty, a letter in which he suggested our making an effort to ascertain whether any of our own society members might be seriously feeling the pinch of these hard times. Bankers are not the only ones entitled to use the term—frozen assets—and we suspect that many physicians are constantly in possession of more "frozen" assets than of any other kind. Furthermore, physicians are not accustomed to expecting aid in their money stringencies—having for so long a time had to be self-reliant. The national government may ease the market by purchasing a few million bushels of wheat; may extend unlimited credit to large scale speculators; may thaw out the cold mortgages in bank vaults; but, it is not likely to convert into cash the physician's unpaid fees charged against patients.

If there be any among our members who are at present financially embarrassed because of the existing business conditions, we trust that they will communicate with the Editor of this Journal or with the President, Dr. Hag-

erty, or the Secretary, Dr. Morrison, all of us representing the Medical Society of New Jersey, and we will give prompt attention to any requests. And, it need scarcely be said, all such communications will be treated as *strictly confidential*.

### WHAT PRICE FOOTBALL!

From the front page of The Sun, New York evening paper, of December 2, we secured the following item of news: "One more name was added to the list of deaths from football injuries this season when Cornelius Murphy, 1 of the 3 Fordham players injured in the game with Bucknell on November 21, died in the Fordham Infirmary at 8 o'clock this morning. \* \* \* Murphy is the second player on a *major team* to die this season because of injuries received while playing. Richard Brindley Sheridan, a West Point Cadet, was carried off the field of the Yale bowl October 24 with a broken neck. *The death of Murphy is the twenty-ninth (29) attributed directly to football injuries since the start of the 1931 season.*"

"The game in which (Cornelius) Murphy received his fatal injury was one of *the most spectacular* of the season. \* \* \* James Murphy, the captain, and outstanding star of the Fordham team, was taken off the field in the last minute of play, after he had been *overwhelmed by several tacklers* as he received a forward pass. Cornelius Murphy was hurt in the third period onslaught by the Bucknell eleven, when *observers of the game were noting* that the game was being *fought in an unusually hard manner*. \* \* \* John Szymanski, substitute for Murphy, is still in a serious condition at Fordham Hospital, as the result of injuries received in the same game when he relieved Murphy after he had been hurt. *Szymanski's left side is paralyzed.*"

"Paul Howell, who was *battered by the drive* of the Bucknell players, was carried off the field a few minutes later", but "he has *apparently recovered*".

The italics used above are substituted for plain letters by the Editor; otherwise, the

quotations are reproduced with exactness and without any distortion for effect. The fictitious "visitor from Mars" might well be puzzled, reading the Sun item, as to whether it really recorded an innocent bit of *play* or a bitterly contested piece of *warfare*; and we can imagine his soliloquy as being something like this: "If this be *sport*; if this be a *friendly contest* between 2 groups of school boys; if this be a *game*, wherein amateur athletes disport themselves for the entertainment of their families, friends, sisters and sweethearts, and, in addition, for temporary college prowess; then, these civilized Americans are more *barbarous* than any previously known race of *human beings* depicted in history."

Bear baiting, bull-fighting, even cock-fights, are *taboo* in this *civilized* country. We are squeamish about the needless killing, or even serious injury, of an animal; the very thought—that possibly a bear, a bull, a horse, or a chicken, will be stricken or destroyed in a sportive contest, is repugnant. We frown upon such performances in other lands, and enact laws to prevent them in our own.

There is a limited "open season" for the killing of *deer*; but it is always open season for the killing, or maiming of *dears*; Szymanski's maimed condition is possibly worse than Murphy's long rest in a cemetery. The animal—*deer*—may not be killed, even for food, save in a certain period of the year; the human—*dear*—may be killed, ruthlessly, and without fear of retributive punishment or blame, at any time of the year; for when football is out of season the wild, irresponsible, thrill-seeker, and speed maniac, has an even larger field of activity with his death-dealing automobile.

Returning to the news item in the Sun, you may find on page 2 of the same paper, this additional note: "The administration, faculty and students of Bucknell University are exceedingly shocked and grieved over the death of Cornelius Murphy. \* \* \* To his parents and to Fordham University, we extend our sincerest sympathy." Such, it seems, was the wording of a telegram from the highest official of Bucknell. We cannot picture the *feelings* of a *University*, but we can imagine what



a *solace* that message must have been to the *dead boy's parents*.

Is there any word from Bucknell or Fordham concerning an intent to suppress football or to prevent such killings? They are not, properly speaking, accidents. No indeed! Not at all! In fact, you will probably be able to secure in a short time the new schedule of coming athletic events, and can figure where the next public killing will take place. Each of the 29 football deaths above referred to was part of, or a sequel to, a *grand spectacle*. The people must be entertained, and what could be more entertaining than the killing or maiming of an athletic young college boy by another, or group of other, college boys?

A spectacle! A death! Come, let's make a Roman Holiday!\*

\*(Within an hour after writing this editorial we learned from the New York Times of December 4 that the number of football deaths had increased to 32. Later, in the New York Times of December 6, the total number reported for the season had reached 40.)

### ERRORS IN THE JOURNAL

Into even the very best of magazines typographic errors creep now and then, no matter how carefully galley and page proof may be read. It is not surprising, then, if such errors occasionally appear in a periodical the proof-reading of which has frequently to be done on a train, or late at night in a hotel bedroom, by an over-worked Editor. Quite recently, the morning mail delivered to this Editor an anonymous communication directing attention to a mis-spelled word in the title of a newspaper clipping reproduced in the November Journal, Department of Public Relations, where the word—dilemma—was printed with but one letter m; dilemma instead of dilemma. We enjoyed the joke "on us" all right but would have enjoyed it even more had he attached his name and given us the opportunity to retaliate immediately by pointing to an error, on his part, when directing his envelope; his communication having been addressed to "Dr. Henry O. Reik, M.D." We are proud of the title, acquired in a proper manner from a respectable university, but do

not insist upon having it attached to both ends of our name.

Not very long ago we opened one of our Journals, and nearly fainted when one word seemed to stand out "as conspicuously as a sore thumb". Describing the dedication of an historic monument, the word—statue—appeared as—statute; and that error was in an article which had been read: editorially in the original manuscript; then by the printer; later, in galley proof, by the Editor and by his secretary; and, finally, in page proof by both the Publisher and the Editor. It is incredible that such a thing can happen, but it did.

There is, however, another type of error which annoys us much more than a mere slip in spelling, and we have now to explain and apologize for one of that sort.

In the Journal of November 1931, we published, among the Original Articles, one by Dr. Joseph H. Marcus, of Atlantic City, and in the title heading appended to his name the initials "F.A.C.P." The manuscript submitted by Dr. Marcus was properly marked—F.A. A.P.—but the Editor, unaware of the existence of an organization conferring a title to which such initials refer, but being accustomed to the initials—F.A.C.P.—assumed that the typist had made an error, and changed the F.A.A.P. to F.A.C.P. Later, the Editor learned something about the American Academy of Pediatrics, and that Dr. Marcus is a Fellow of that organization, in fact, one of its founders, and Chairman of the New Jersey group; but that knowledge was acquired too late to make correction in the November issue of the Journal.

We sent immediately to the Atlantic County Medical Society, even before the November Journal could have reached any of its readers, a statement of these facts, together with a request that our letter of explanation and apology be read at the County Society meeting, by its President, lest some reader might think Dr. Marcus had falsely laid claim to Fellowship in the American College of Physicians.

We can only ask pardon for this and other mistakes in the Journal—which we do, very humbly—and promise to strive for the performance of better work hereafter.

## Special Article

### SOME OBSERVATIONS UPON HEALTH MATTERS IN ENGLAND

HENRY O. REIK, M.D., F.A.C.S.,

Atlantic City, N. J.

In the early part of this year we published serially in this Journal, running through the months of January to May, both inclusive, a Travel Talk, wherein, along with an account of our peregrinations during the summer vacation period of 1930, we reported a casual and somewhat desultory investigation of state medicine in Ireland, England and France; and in the last article of that series presented for comparison, and as a stimulant to further study of the present tendency of medical practice, such information as was then at hand regarding health insurance in other countries. At the Annual Meeting of the Medical Society of New Jersey, in June of this year, provision was made for a special committee to study this very interesting problem, with the idea of ascertaining more accurately: what progress the so-called *state medicine* has made elsewhere; what beneficial results, if any, have accrued to the public, and with what effect upon the medical profession; and, further, to consider what action ought to be taken by the organized profession in this state with reference to the threatened advent of similar laws in this community. Shortly after the passing of our annual convention a new book appeared, which we soon learned was the first of 3 volumes written by Sir Arthur Newsholme, who had for several years been engaged upon a thorough investigation of state medicine as proposed or practiced in all countries of the world. We briefly reviewed that first volume in the Journal and, having placed an order for the second and third volumes to be delivered so soon as they are off the press, we are anxiously awaiting the privilege of reading and the opportunity for passing on to our readers a synopsis of his findings. All of that report will, of course, be placed in the hands of our society's committee at the earliest possible moment.

Because of Newsholme's work, performed by one so exceptionally competent to conduct an investigation of that sort, it will probably be unnecessary for our committee or any one else to make any extensive search into that subject at this time, except possibly for further enlightenment upon special details

having a local interest or bearing. So, in our own wanderings during the summer of 1931, although we traveled in other countries, through territory of new explorations for us, we felt that inquiries upon this subject were needless. We did, however, happen incidentally to collect some information having a value because it could in some respects be compared with figures presented last year, and because additional light was thrown upon aspects of the question other than those developed in our previous report. For instance, strange as it may seem, the "financial crisis" which in September brought about a sudden "change of government" in Great Britain, with a resulting nonpartizan cabinet and a consequent radical alteration in fiscal affairs—affecting physicians as directly and as deeply as any other group of citizens—threw upon the great newspaper screen of publicity, in bold relief, a highly complimentary picture of the medical profession as compared with other professional or business organizations. That picture we will paint for you in the course of this article but, in order that our observations may be harmoniously arranged and logically presented, permit us to commence this report with another matter and to proceed systematically in our presentation.

The London Times of September 4 announced that the Twelfth Annual Report of the Ministry of Health, covering the fiscal year ending on March 31, 1931, had just appeared in printed form and might be obtained from His Majesty's stationery office upon payment of 5 shillings. As the Times of that day and of the fourteenth and twentieth of September published lengthy abstracts of the report, we will utilize such portions of those abstracts as have a marked bearing upon or a marked similarity to our problems in New Jersey, or, as in some instances, afford a striking contrast.

The Minister of Health, in the new Cabinet, is Sir Neville Chamberlain, but the report presented by him covers a period of time prior to his taking that office; a fact to which he directs attention, in giving credit to, as well as placing responsibility upon, the previous "government"; and a fact to be kept in mind, in view of a defense of the Health Department and of the medical profession which he later made in Parliament.

We do not at the moment recall his exact title—and the printed report is not at hand—but the chief administrator of the Health Department is Sir George Newman, and in the opening paragraph of one of its articles the Times says of him: "Sir George Newman has brought out another of his useful annual



reports on the state of the public health. The report is especially interesting owing to the personality of the writer, who is an enthusiast for the work of his department and for the improvement of public health."

In presenting selected portions of the Times' abstracts, we will supply our own headings so that comparison with New Jersey conditions and figures may be more easily made.

#### MORTALITY RATES IN SPECIAL DISEASES

The year 1930, it is stated, was exceptionally healthy as measured by figures, for it was the year of the lowest total death-rate and the lowest infant mortality rate yet recorded. The children born numbered 648,811, an increase of 5138 on the previous year. The number of persons who died was 455,427, or 77,065 fewer than in 1929. The principal certified causes of death were: Diseases of the heart and circulation, 245 per 1000 deaths; cancer, malignant disease, 127 per 1000 deaths; bronchitis, pneumonia, and other respiratory diseases, 114 per 1000 deaths; diseases of the nervous system, 90 per 1000 deaths; all forms of tuberculosis, 79 per 1000 deaths.

The ingredients of this table remain the same from year to year, as usually does their order, but *on no previous occasion has the number of deaths from cancer been in excess of those from bronchitis, pneumonia, and other respiratory diseases.* The number of deaths of infants under 1 year of age was 38,908, or approximately 9000 less than in 1929.

The following table shows approximately the sums expended in sickness and disablement benefits by approved societies in England and Wales in 1930, and the estimated total number of weeks' sickness represented by the payments:

	Amount		Estimated number of weeks' sickness	
	Men	Women	Men	Women
Sickness Benefit	\$33,160,000	\$16,570,000	7,700,000	5,500,000
Disability Benefit	\$16,970,000	\$11,425,000	7,650,000	5,700,000

These figures, it is stated, indicate that in England and Wales there was lost to the nation in the year, among the insured population only, and excluding loss due to sickness for which sickness or disablement benefit is not payable, a total of about 26½ million weeks' work (510,577 years), or an equivalent of 12 months' work of about 510,000 persons. Moreover, it must be remembered that it is not only the working equivalent of 510,000

persons that was involved, but also the labor and expense entailed in their care during the period of incapacity.

#### INFANT MORTALITY AND MATERNITY WELFARE

Here, it will doubtless be promptly noted by those familiar with the figures, there is a strong resemblance to conditions at home:

In a section of the report which deals with maternity and child welfare it is stated that departmental satisfaction because the infant mortality rate for 1930 was the lowest hitherto recorded in this country—namely, 60 per 1000 live births, as compared with 74 in 1929—is tempered by the continued apparent failure to secure any reduction in the puerperal mortality rate, which in 1930 showed a slight increase on the rate for 1929. The puerperal death-rate for 1930 was 4.40, as compared with 4.33 in 1929, and 3.81 per 1000 in 1923. It is probable that in some areas there are special circumstances which adversely affect the safety of child-bearing women, and, if this is so, it should make those responsible for health services alert, eager, and of fixed intent to ascertain the causes of this unhappy situation and to seek means of eradicating or removing them.

In recent years there has been great improvement in the teaching of ante-natal care, both to medical students and to pupil-midwives, and an increased appreciation of its importance. With reference to ante-natal centers, it is stated that it is possible that eventually the ante-natal clinic, as we know it today, especially in the larger towns, may, to some extent, disappear, thus leaving the ante-natal supervision of maternity patients to be carried out by private practitioners with the assistance of a relatively small number of consultative ante-natal clinics staffed by specialists. Whatever the ultimate destiny, however, it is clear that there will remain a need for ante-natal clinics, particularly in industrial and urban areas, for some time to come; the full development of pre-natal supervision will depend very greatly upon the efficiency of these clinics, not only in the quality and value of the advice given day by day to the women in attendance, but in the training and experience they are able to provide for medical practitioners, and upon the influence which they exercise on public education in maternal welfare.

#### RELATIVE NUMBERS OF MALE AND FEMALE CITIZENS

Another interesting fact brought out in this report is the relationship between the number of males and females. Many more

boys are born than girls every year, and up to the age of 25 the males exceed the females. After 25 a change takes place, and the females outnumber the males through all the succeeding years of life.

#### PARATYPHOID AND SMALLPOX

An outbreak of paratyphoid fever which affected some 300 persons, and lasted from the end of January to the middle of March, 1931, occurred in South-West Essex. Approximately 230 of the cases were reported from the Epping Urban District, the remainder occurring in the Epping Rural District, the Loughton Urban District, and the boroughs of Walthamstow and Ilford. There were 7 deaths, 6 in the Epping Urban District and 1 in the Epping Rural District. Inquiries by a medical officer of the Ministry, in consultation with the Medical Officers of Health of the county and of the districts concerned, furnished strong *prima facie* evidence against milk, as all the primary cases occurred among persons who had consumed raw milk produced at a dairy farm in the Epping Rural District. The infection seems to have been introduced by one of the employees on the farm who, unknown to himself, was suffering from a mild attack of paratyphoid fever while he was still at work and handling the milk before its distribution. On discovery of the probable source of infection, prompt measures were taken to disinfect the utensils at the farm, to stop the milk supply for a period, and to engage an entirely new and, so far as could be ascertained, infection-free staff of milkers. In addition, all the milk was pasteurized by one contractor before being passed on to other retailers.

In 1930, 11,839 cases of smallpox were reported, as compared with 10,967 in 1929. The counties chiefly affected were Essex (1555 cases), Glamorganshire (314 cases), Leicestershire (1794 cases), London (5151 cases), Monmouthshire (504 cases), Staffordshire (418 cases), and the West Riding of Yorkshire (890 cases). There has been a continued decline in the number of cases in the northern counties, but an increase in Leicestershire, London, Middlesex, Essex and Kent.

The report also calls attention to the importance of *vaccination*. Apparently this still remains a controversial subject, but the figures given in this report furnish an outstanding illustration of the value of vaccination. During the year 1930, *no child up to 7 years of age* who had been *successfully vaccinated caught smallpox*. Of the unvaccinated children, many hundreds did. Only 2 *vaccinated children* between 7 and 9 years of age *caught*

*smallpox*: of the *unvaccinated* children of the same age the corresponding *number was 661*. After 15 years of age, re-vaccination becomes desirable; otherwise, there is a risk of smallpox. *Comparison between the successfully re-vaccinated and the unvaccinated who caught the disease, up to the age of 7, works out as 13 against 6690*.

#### MEDICAL, OR HEALTH, INSURANCE

Finally, we came to that portion of the report which we especially looked into last year, and which supplied, first, some comparative figures regarding the incomes of panel doctors, and then some explanatory statements of interest to seekers after the truth.

Figures indicating the extent and cost of the insurance medical service in England in 1930, show that 14,700 doctors were engaged in insurance practice. Medicines and appliances were supplied as part of medical benefit at about 9000 chemists' (the English equivalent for our words—pharmacist or druggist) shops. The number of insured persons entitled to medical benefit was nearly 14,500,000. Medical benefit cost more than \$44,310,000. Of this sum, insurance doctors received \$32,235,000 in respect of their duties of attending and treating insured persons; and \$9,638,500 of the balance was paid to insurance pharmacists for supplying drugs and appliances. The remainder was expended in adjustments of the main finances of medical benefit to various special conditions arising under the Act, or in the circumstances of insurance practice.

About \$1,000,000 was paid to country doctors on account of mileage, the payments being so calculated as to take account both of distances covered and of the difficulties of locomotion in certain areas which would make distances by themselves an inadequate measure of demands upon doctors' time and energy; nearly \$50,000 was set aside to enable country doctors to attend the courses of post-graduate study, and to provide them with other desirable facilities (such as maintenance of telephones, motorcars, and branch surgeries, or reasonable vacations); doctors received about \$980,000 for medicines and appliances supplied by themselves, personally, and for medicines dispensed by them in country districts where patients are out of reach of pharmacies; and, finally, sums of about \$370,000 and \$37,500 were paid on account of the small numbers of insured persons who exercised their option to obtain treatment, including medicines, through approved institutions, or, with the consent of Insurance Committees, to



make their own arrangements for medical treatment.

In the section relating to the Insurance Medical Service, Sir George Newman discusses the subject of *sickness claims and certification of incapacity for work*. He points out that for several years reference has been made in his reports to the disquieting increase in claims for sickness and disablement benefit which has been observed during the past 10 years. He refers to investigations that have been made and a memorandum which has been issued to all insurance practitioners, and states: "It is quite clear from the facts stated in the memorandum that *laxity of certification, though widespread, is by no means general*—that there are, in fact, a very large number of practitioners to whose standard of certification exception could not reasonably be taken. What is necessary, is—that representative professional opinion should be brought to bear on those whose standard is defective, with a view to the removal of misconceptions and the development of a stronger sense of professional responsibility in this important matter. It is satisfactory to observe substantial signs of increased vigilance and care in this certification of incapacity."

The last paragraph above is of vital import and conforms to the opinion we ventured to express in a previous communication; i.e. unquestionably, there are some fakers, and some other persons among those insured who, while not deserving of quite such a harsh designation, are nevertheless willing to take advantage of the opportunity to procure unearned, or undeserved, "sickness benefits"; and it appears to be also unquestionable that there exist *some* physicians who lend themselves to the furtherance of such a dishonest procedure; but, the relative proportion of such deceivers is small, and the number of physicians of such base character is very small in relation to the total number participating in this insurance work. In other words, the criticisms directed against this particular evil result of the health insurance plan have, in many instances, grossly exaggerated the facts. Of course, our conclusion does not entirely dispose of the fact that *the stated evil does exist*, and needs to be constantly watched. The desire to obtain something for nothing is rather wide-spread, and there is nothing surprising about its appearance in connection with the calculation of insurance benefits. Furthermore, a very considerable percentage of people who are otherwise honest will show no hesitancy in taking an undue advantage of a government-managed affair. So long as

human nature remains what it has been, and still is, so long will we have cheaters of this sort. That explains, without excusing, action of the false claimants. With respect to those physicians who are accused of aiding and abetting the frauds, we must not overlook the fact that in many instances it is difficult to detect the malingerer, or difficult to determine the exact point at which a patient's honest claim terminates; not all errors made by physicians in the matter of incapacity certification are designedly fraudulent; a considerable proportion, possibly even the majority, may really be the result of excessive solicitude for the welfare of patients.

In addition to the views expressed by Sir George Newman, quoted above, we happened upon another published discussion of the question by one in a position to speak with the voice of intelligent authority. As most of our readers probably know, the British Health Insurance plan is conducted through organizations called "Friendly Societies"; these societies handle the funds collected from insured persons or appropriated by the Government, pay the enrolled physicians their *per capita* fees, and transact all of the general business. The Annual National Conference of such Friendly Societies was held at Margate, England, during the third week of September, and in the London Times of September 26, 1931, we read an address by Dr. Alfred Cox, delivered at the closing session of that Conference the previous day. Dr. Cox is the Secretary of the British Medical Association, and holds a position in organized medicine in Great Britain comparable to that filled in the American Medical Association by Dr. Olin West. We herewith reproduce the abstract of his address as published in the Times:

"The closing session of the National Conference of Friendly Societies was held at Margate today under the presidency of Mr. Herbert White. For the first time in its history a representative of the medical profession attended the conference.

In his address, Dr. Alfred Cox, Medical Secretary to the British Medical Association, urged coöperation between the medical profession and the approved societies to maintain the insurance basis of National Health Insurance, and described the difficulties of the panel doctors in certification of unfitness to work.

Dr. Cox said that when he was invited to the conference the secretary made a Scriptural allusion to "Daniel in the lion's den". He was taking whatever risks might be involved because it was time they had a doctor at that conference. He wanted to make it clear that

he was speaking from an individual point of view, but he did not think it would be repudiated by his association. He was going to speak as a man who was for many years engaged in industrial practice and who had been also a friendly society doctor.

In 1928, Sir Walter Kinnear appeared on that platform, and since then there had been a great deal of discussion on medical certification of sickness. Recently, there had been issued a memorandum by the Ministry of Health which contained some damaging statements on the subject. What was the main cause of the increased sickness claims? It was the different outlook of insured people. We could not have propaganda going on for years, urging people to take greater care of their health, without having a marked effect upon the public mind. He asked them to put themselves in the place of the doctor who was asked to give a certificate. There were a number of conditions where there was considerable difficulty in coming to a decision, and in those cases the practice of the profession had been to give the man the benefit of the doubt. If the doctor did not do that, he was unworthy to be a doctor.

Any help the medical profession could give to the Government, or to approved societies, or anyone else, to restrain improper certification, physicians would give willingly, but did anyone think there could be a scientifically exact standard of certification? He believed the average doctor was an honest man, but doctors have to decide very important questions in the face of difficulties such as confront very few people.

He could assure the approved societies that they had the hearty coöperation of the medical profession in preserving the insurance principle of National Health Insurance. He thought the time had come, however, to put a stop to the orgy of appeals to the public purse that had been going on for many years.

Another need was to keep the politicians out of National Health Insurance. Was there not a very good case for saying now, and for ever, that the politicians should have no control whatever in this, seeing that all the costs were to come out of the pockets of the people? He came back a few days ago from an international conference, at Budapest, where it was acknowledged that the British system of health insurance was the best. It had its faults, but when he heard the tragic stories of the results of the interference of politicians with the European systems of

health insurance he hoped they would consistently resist the introduction of politics in what was a matter of business.

#### EFFECT OF RECENT FINANCIAL CRISIS UPON HEALTH INSURANCE PRACTITIONERS

In connection with the above discussion, and bearing upon the broad question of the honesty and ethical uprightness of physicians as a class—in comparison with other class-groups in our social organization, whether classified for professional or purely business purposes—we take pleasure in reporting, as was promised in the first part of this article, some very recent happenings in London concerning a proposed reduction in the pay of panel doctors, necessitated by the "financial crisis" and the British Government's plan for readjustment of national affairs.

Anyone who has read the daily papers of the past few months must know something of the sudden collapse of the Labor Government early in September and the call upon Premier MacDonald to form a nonpartizan cabinet to be charged with the special duty of reorganizing the nation's fiscal policy. As we happened to be in Europe at that time, and always enjoy the privilege of reading daily the London Times when on such vacations, it is possible that we had, however, more detailed information about passing events than those who had available only the brief cabled news items published in American newspapers. So, we offer the following information under the assumption that it will be *news* to most of our readers, and in the hope that it will be interesting—in so far as it is new—and explanatory, perhaps, of some other points.

The first duty of the "Emergency Government" was to "balance the budget"; or, in simpler language, to reduce governmental expenditures for the next year to a sum of money less than the probable national income. That task required the cutting down of expenditures or provision for increasing income, or a plan combining both methods. In the line of economy, it was suggested that along with other provisions for reducing expenses there should be temporarily—for the next fiscal year, at least—a 10% reduction in salaries of government employees, including in that list the police department, school teachers and physicians engaged in national health insurance work. When the Chancellor of the Exchequer presented the new Appropriation Bill to Parliament it contained a provision for reducing the panel doctor's *per capita* fee from 9 to 8 shillings for each name upon his list. It was later discovered, while



the Bill was under discussion, on the second reading file, that this 1 shilling reduction amounted to something more than 11%, instead of the 10% reduction applied to all other groups, and, in consequence, the Government voluntarily amended its own proposition so that physicians should not be treated worse than other employees.

Referring once again to the Minister of Health's Report, you will note that during the past year 14,700 physicians had been paid in the way of fees \$32,235,000; which means that physicians doing health insurance work—practicing state medicine—received from that source an average income of \$2200 each. Those figures are approximately the same as those recorded for the previous year, when physicians were paid \$31,250,000, or an average of \$2232. While the Bill was under discussion in the House of Commons, an "opposition" member, one of the Laborites who disapproved of Ramsay MacDonald's course of action and followed Henderson in the formation of an opposition party, made a vicious attack upon the medical section of the new Government's proposition, and moved that it be stricken out. In the course of his speech he related some of the financial history of national health insurance, stating that: "The Treasury grant to the National Health Insurance Fund has fallen from \$51,250,000 in 1921, to \$30,250,000 in 1930, notwithstanding that the number of insured persons has greatly increased. There were 12,674 panel doctors in 1913. By 1930 the number had increased to 15,750. The average income of panel doctors has increased from \$1520 in 1913, to \$2315 in 1930. \* \* \* *As one result of our National Health Insurance, this country has the lowest general mortality rate in the world.*"

It will be noted that this opponent of the measure under consideration was not opposed to national health insurance; he was, in fact, an enthusiastic advocate of state medicine and was claiming credit for beneficial results growing out of legislation instituted and favored by the Labor Party, and up to this point his statements were reasonably accurate for a politician engaged in debate. His attack was purely a political maneuver, and after a logical introduction, including an expression of fear that the changes proposed would result in serious effects upon the health of the community as a whole, he pretended to believe that the \$4,250,000 to be saved by reduction of fees to physicians constituted a

"raid upon the Health Fund", and he then launched into a typical, bombastic political speech. Of course, no one was affected by his diatribe, but it gave Mr. Chamberlain, who as Minister of Health was at the moment representing the Government in charge of the Bill, an excellent opportunity to respond with the truth about the situation, to explain that insured persons becoming sick would not be deprived of any help or benefit to which they had always been entitled, to thoroughly deflate the politician's balloon, and to pay a very nice compliment to the medical profession.

After disposing of his opponent's "allegation and insinuations which have no foundation in facts", he gave assurance that there would be "no raiding of the Fund" and the proposed temporary reduction of doctor's fees should be looked upon as a contribution by doctors toward the meeting of a national emergency. We regret that it was impossible to procure a verbatim report of Mr. Chamberlain's speech, but, according to the newspaper account, he explained that when the Bill was being prepared a consultation was held with officers of the British Medical Association, who promptly accepted the proposed fee reduction and volunteered to go any length to aid their country in time of distress. He directed attention (diplomatically), by way of contrast, to the actions of some other organizations (school teachers and policemen, especially, have been fighting salary reductions), and said, in effect, that "*if other groups, professional and business organizations, had been as patriotic and shown anything like the spirit exhibited by physicians, the Government's task would have been much easier*".

It was, indeed, interesting to observe that while there were loud protests from some groups, and many letters were printed in the "correspondence" columns of newspapers, arguing against specific salary reductions, and even at one time a scare lest sailors on duty with the Battleship Fleets might revolt, there were few complaints of any kind from physicians, and such of their communications as appeared in the public press were in the nature of support—even though it necessitated personal sacrifice—for an emergency measure.

The Bill was passed by the House of Commons on September 30, the day on which this was written, and will doubtless be adopted by the House of Lords and become a law by promulgation of the King before this reaches our readers.

## THE DEATH OF NORTON L. WILSON



### BEYOND THE HORIZON

By Robert Freeman

When men go down to the sea in ships,  
'Tis not to the sea they go;  
Some isle or pole the mariners' goal,  
And thither they sail through calm and gale,  
When down to the sea they go.

When souls go down to the sea by ship,  
And the dark ship's name is Death,  
Why mourn and wail at the vanishing sail?  
Though outward bound, God's world is round,  
And only a ship is Death.

When I go down to the sea by ship,  
And Death unfurls her sail,  
Weep not for me, for there will be  
A living host on another coast  
To beckon and cry, "All hail!"

WILSON, Norton L., 70 years old, of 410 Westminister Avenue, Elizabeth, New Jersey, died of angina pectoris, in the Elizabeth General Hospital, on November 13, 1931.

Dr. Wilson had a singularly active and useful career in the field of medical science and civic service. A life-long resident of Elizabeth, he traveled to far quarters of the globe in pursuit of his interests, which had medicine as their chief feature, but which included art, literature and history.

Norton Wilson was born in Elizabeth in 1861, of a family tracing its origin to England. Although he prepared at the old Pingry School to enter Princeton University, he later changed his mind. He was urged to take up medicine, by the late Dr. William A. M. Mack, once Mayor of the city, and studied with him for a time, later entering Bellevue Medical College, New York City. He was graduated from that institution in 1884, practiced for a year in Roselle and then opened an office in Elizabeth.

While still a Bellevue student, he became house physician at the Elizabeth General Hospital, and in 1884 was appointed to the dis-

pensary staff. A few years later he was made a visiting physician, and in 1889 became the first attending physician in the new department of ophthalmology, otology and laryngology, which he aided in organizing.

In 1905 Dr. Wilson succeeded Dr. Alonzo Pettit as head of the hospital staff, and served in that capacity until 1926, when at the age of 65 he was retired.

In 1888, Dr. Wilson married Miss Susan S. Griggs, of Boston, who survives him. He also leaves two daughters, Mrs. M. Wilson Barbour, of Toledo, O., and Mrs. Gerald G. Hutton, of Penfield, N. Y.

Among his many professional connections were memberships in the American Medical Association, the Medical Society of New Jersey, the Union County Medical and Clinical Societies, the New York Academy of Medicine, the American Laryngological, Rhinological and Otological Society and the American College of Physicians and Surgeons. For several years he was one of the contributing editors of the American Laryngological Journal. He served as President of the Union County Medical Society, President of the Medical Society of New Jersey, and for many years had been Chairman of the Board of Trustees of the State Medical Society.

When he retired from the hospital staff, Dr. Wilson was guest at a Testimonial Dinner in New York City, given by his colleagues. A watch was presented to him and tributes were paid to his long period of service. Shortly thereafter, he was appointed to the Senior Staff of the hospital, an honorary post filled by but one other physician, the late Dr. Edgar B. Geier.

During the World War, Dr. Wilson served as head of the medical advisory board for the county, and for many years he was Chairman of the Board of Censors of Union County Medical Society. He also was a Fellow of the American College of Surgeons.

Since 1918 he had served as a member from Union County on the Board of Managers of the State Prison. He also served terms on the Board of Health, the Board of Police Commissioners and the directorate of Bonnie Burn Sanatorium, of New Providence.

He held membership in the Elizabeth Club, the Suburban Club, the Professional Club, the Rotary Club, the Young Men's Christian Association, the Consistory and the Shrine. In the Rotary Club, Dr. Wilson served in 1922 as President, and represented the organization at many state and national Rotary gatherings. He was a member of Westminister Presbyterian Church.



Among the many resolutions passed by organizations of which he was a member, and expressions of affection by friends, are those of the Rotary Club and of Dr. Vinciguerra, as follows:

Describing Dr. Wilson as "The Upright Citizen", Donald H. McLean told the Rotarians that "no man ever was a better citizen, no man ever thought more of his city and no private citizen ever did more for his city than Dr. Wilson". He praised Dr. Wilson's character and remarked his upright bearing, declaring that "it was his right to walk erectly, with head high, because of the sterling life he lived".

Dr. Michael Vinciguerra extolled Dr. Wilson as "The Faithful Friend". "From the very first, he became a silent companion, unknowingly contributing stimulus and comfort to my subjective life. He inspired me to have more confidence in my fellow man. He incarnated for me an ideal of what a man ought to be and automatically became, and continues to be, an undetachable part of myself. I have found him always the same, both in private and public life. His heart harbored no malice. His learnings long ago had overcome the instincts of jealousy and selfishness. He seemed to esteem duty above reputation, and the approval of conscience more than the world's praise. While respecting the personality of others, he preserved his own individuality and independence and had the courage to be morally honest, though it might be unpopular."

#### RESOLUTIONS ADOPTED BY THE UNION COUNTY MEDICAL SOCIETY

Once more the Union County Medical Society has been called together to record the passing of one of our members, Dr. Norton Luther Wilson—a man beloved by the medical profession, at the head of which he stood.

This loss to the County Medical Society and the Medical Profession is, indeed, great.

His high attainments will ever be an inspiration to those who knew him and worked with him.

He was a Past-President of the Union County Medical Society and of the Medical Society of New Jersey, which offices he filled with great dignity and efficiency.

To the family, the Union County Medical Society extends its deepest sympathy.

Committee on Resolutions,

George S. Laird  
P. Du Bois Bunting  
G. W. Strickland

## Collateral Reading

### HOW'S YOUR BLOOD PRESSURE?

Clarence L. Andrews, M.D.,

Attending Physician and Medical Chief, Atlantic  
City Hospital, Atlantic City, N. J.

(Published by The Macmillan Company.  
Price \$2.50)

The author, having become convinced, through 17 years of general practice, that the lay public has just that "little knowledge" of blood pressure which is "a dangerous thing", has written this book in the hope of making the subject clear to that public—to "the victims of blood pressure psychology who, because of hearsay, misinformation, and inability to separate cause from effect, live in constant fear of some impending body calamity—which may never occur".

Our Journal readers are essentially physicians and their families (professional and semi-professional readers, one might call them) rather than out-and-out laymen. Naturally, our reviews are usually written from the point of view of such readers. It occurs to us, however, that this book is one which our readers will have the opportunity to, and will perhaps wish to, recommend to patients and friends—that is, to a lay-reader group. Hence, the review which follows is written in terms different from our customary ones—the terms in which it may be presented to lay-reader friends and patients.

The catchy title reveals the style. The book is addressed directly to "you", so that to read it is to feel yourself a patient chatting on this subject with your family physician. You start with an explanation of what is meant by pressure of the blood: this is made clear to your lay mind by comparison with pressure of water in a water tank. Next, you study the circulation of the blood, from the one-celled ameba to the highest form of life; your own circulatory system is made clear by comparison with the heating plant in your home. With this foundation laid, you are ready to learn how blood pressure is estimated, and what is meant by *normal*, *high* and *low* pressure. Next, you learn what may cause this symptom—such factors as heredity, physique, the exhaustive fevers you may have had in childhood; or, acute infections, such as diseased teeth or tonsils, from which you may now be suffering. Finally, you learn the relation of your blood pressure to such current matters as the food you eat, your work, worries, exercise, and pace of life.

When you lay this book down, you understand blood-pressure as a *symptom*, not a disease. If you have this symptom, you know something of its relation to your past and present life. If you do not have it, but fear it, you know the possibilities of developing it, and the preventive value of periodic health examinations. If you have children, you know how to build up their constitutions in such way as to prevent their developing abnormal pressure. And, you have learned this in a simple, friendly fashion; which does not leave you bewildered in a maze of unfamiliar scientific terms.

Perhaps the above may suggest that the author attempts to diagnose, for the public, through his book. On the contrary. Never once does he permit the reader to lose sight of the dangers of *self-diagnosis*. Rather—and this, to our mind, is one of the book's chief merits from a medical point of view—he makes the reader understand that a multitude of causes and significances may hide behind one single symptom in a diseased condition. In consequence, the lay reader realizes forcibly how vast must be the fund of knowledge of his physician and how foolhardy is he who tries to diagnose for himself. We could wish, indeed, that there were more such books in circulation, for we believe they would help greatly to educate the public to realization of the danger of self-diagnosis and of the value of consulting a reputable physician.

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## Medical Ethics

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### HURRY, HURRY, HURRY!

John Hammond Bradshaw, M.D., F.A.C.S.,  
Orange, N. J.

*"No one in a hurry can possibly have his wits about him."*—(Emerson)

One can be in haste and still not be in a hurry. Haste means speed. Hurry means distraction, and lack of care, and even may result in loss of speed. Many of our misfortunes, if not disasters, are due to hurry. We hurry our meals, and we get indigestion. We hurry our rapid transit, and we get an accident. We hurry our operation (be it either for lack of time, or display of our skill), and we omit something which should have been

done or else (which is worse) we do something which should not have been done. Is not this true?

Go back into the years of your own experience. Can you remember when you drove a horse? Now, when you made that horse hurry on your rounds, can you not see, in memory even now, that half-trot and half-gallop which the obedient animal performed at your persistent urging? And when you reached your destination, did you notice the heaving flanks of your horse, and his distended eyes? Hurry had upset his whole physiology. You, yourself, knew this, and yet you did it again and again. Of course it wore your animal out before his time, but you thought the objective was worth the price. Was it? Were you, yourself, at the time of your arrival, in the best condition to render your most skillful service?

Believe me, you are unfortunate if your practice is so extensive that you must always hurry. How often over the 'phone come the words, "Hurry, hurry, hurry!" In almost 99 out of 100 cases, excitement alone dictates this demand. You know it, and yet you hurry!

The writer once knew a wise old doctor with a huge country practice. He looked after his horses and carriages himself, not because he was poor, but because he loved to do it, and it offered exercise and distraction from his many cares and worries. Whenever he received a hysterical call to hurry, hurry, hurry, he calmly went out to his barn and took off and greased the four wheels of his chaise. He said it put him in the proper frame of mind to do his best and most deliberate *thinking*.

Of course we are in a hurry to reach the top. But who in our profession have made the true indelible marks? Was it the man who hurried his education? Was it the doctor who jumped quickest into an extensive practice? Was it that brilliant operator who boasts of his 10-minute appendix operation? Does it not pay to make haste slowly—*festina lente*?

Naturally, we want to hurry to get rich; money does, to most of us, seem so very desirable. At times, to us it seems to buy so very much. It can even buy that leisure with which we trust, in the future, we can "make up our souls". But it takes the true philosopher to realize, after all (after a long life experience), how very little that is really worth while, there is that money will buy.



## In Lighter Vein

### Playing in Luck

Mrs. Reed (with newspaper): "It says here that a woman in Omaha has just cremated her third husband."

Miss Willing: "Heigho! Isn't that just the way? Some of us can't get one and other women have husbands to burn."—Boston Transcript.

### Call a Sleuth

The young wife was heartbroken.

"What's the matter?" asked a friend.

"Oh, my husband is so absent-minded. After breakfast he left a tip on the table, and when I handed him his hat he handed me another tip."

"Well, that's nothing to worry about. It's just force of habit."

"That's what worries me. He kissed me when I gave him his coat."—Tit-Bits.

The policeman entered the restaurant and with great dignity announced to the man at the table next to ours: "Your car awaits without."

"Without what?" retorted the rather loud-mouthed gentleman.

"Without lights", said the cop. "Here's your ticket."

### The Diaphanous Bostonian

A specialist in throat troubles was called to treat a Boston lady, who manifested so much interest in his surgical instruments that he explained their use to her. "This laryngoscope", said he, "is fitted with small mirrors and an electric light; the interior of your throat will be seen by me as clearly as the exterior; you would be surprised to know how far down we can see with an instrument of this kind." The operation over, the lady appeared somewhat agitated.

"Poor girl", said her sister, who was present, "it must have been very painful."

"Oh, no, not that", whispered the Boston lady; "but just as he fixed his instrument in place I remembered I had a hole in my stocking."—Progress Notes, Atlantic City Hospital.

We do not know whether the secret of longevity is hidden somewhere in the item which said a woman in Roumania died at the age of 126 years, "after she had called in a doctor for the first time in her life".—Boston Herald.

Prohibition may not have made it much harder to get a drink, some places; but it has made it much harder to drink it.—Tampa Times.

"And you can cook like mother used to?"

"Yes, if you can stand indigestion like your father used to."

### Got Off Cheaply

Divorced are Mr.

And Mrs. Howell;

He wiped the car

With her best guest towel!

—The Pathfinder.

You've got to hand it to Mr. Gandhi. He is one male who dresses sensibly in hot weather.—Duluth News-Tribune.

## Lighthouse Observations

### AMERICAN FEDERATION OF ORGANIZATIONS FOR THE HARD OF HEARING

Betty C. Wright

(Abstract of an Address before the American Otological Society, June 19, 1931, presented by the Editor of this Journal in place of his usual monthly "observation", remembering some of his own problems when practicing otology.)

#### History of the Movement

A realization of the social problems of deafness led to the formation of the Nitchie Service League in 1910, named in honor of Edward B. Nitchie, a teacher of lip reading. Later, this League became the New York League for the Hard of Hearing, with Dr. Harold Hays as president. Soon after the New York League was formed, organizations began to spring up in other cities—Boston, Chicago, Newark, Los Angeles, San Francisco, Philadelphia and Cleveland. At this time a senior member of your society had a dream of uniting the scattered organizations into a national organization which would bring before the nation a realization of the need of organized work for the hard of hearing. Dr. Wendell C. Phillips, the Founder of our Federation, saw his dreams come true in April, 1919, when representatives of the organizations then in existence met in New York to discuss the formation of a national organization. Thus the American Federation of Organizations for the Hard of Hearing came into existence.

#### The Aims of the Federation

Our Federation is pledged "to improve the conditions of and offer relief to persons whose hearing has been lost or impaired". Our retiring president, Dr. Harvey Fletcher, has interpreted the aims of our organization into the following concrete objectives:

(1) To organize new leagues for the hard of hearing in cities of over 20,000 population.

(2) To promote the efficiency of existing leagues with respect to lip reading; use of hearing aids; social rehabilitation employment; eradication of quackery.

(3) To promote an understanding, by the public, of the problems of impaired hearing among both children and adults.

(4) To remove all unjust restrictions on the hard of hearing in regard to obtaining life insurance and employment.

(5) To promote hearing tests for school children; improved methods of education of those affected; information as to how to obtain medical advice.

(6) To promote medical research on the causes, treatment and prevention of deafness.

"In short", says Dr. Fletcher, "this work aims to help the adult deafened person to overcome his handicap and to enjoy the full rich life to which he is entitled, and to foster a program for the prevention of deafness, particularly among young children."

These, then, are our aims, the goal toward which we are striving. How many mile-stones have been reached?

### The Deaf and the Hard of Hearing

We feel that our organization is unique. The membership is made up, for the most part, of people who have lost their hearing after having heard normally. In this respect we are different from the deaf, though sometimes the two classes become greatly confused in the minds of the general public. You, as otologists, know that seldom do you have occasion to give medical treatment to those who are born deaf, and yet I have found many ear specialists who did not, seemingly, grasp the difference between the deaf and the hard of hearing. We who are hard of hearing know that we had a sense of being crippled when we felt our hearing gradually leaving us. A child born deaf has no realization of the depth of his loss in not being able to hear. Persons with acquired deafness are haunted by the voices of their friends, beloved music, and sounds that are dear. The deaf child grows up with his deafness and is not forced to change his occupation because of it. The hard of hearing adult must readjust his whole life, must become rehabilitated and re-created.

### The Value of Lip Reading

The greatest single factor in the process of recreation is lip reading—the art of understanding a speaker's thought by watching the movements of his lips. To me, it is more than that—it is the key to the door of hope given to me by a member of this Society. Here is my own story. I had a wholesome, happy childhood in a small village where there were kindly family physicians who treated old-fashioned ear-aches in old-fashioned ways. I went away to a teachers' college and upon graduation taught for a few years. Then, what happened? One day, I found that some friends heard distant music that I did not hear, and I became alarmed. I sought the advice of a prominent ear specialist, a member of this Society. The specialist was honest, but evidently no psychologist. Perhaps it would not have been possible for him to realize the utter despair his words would cause. He said: "You are going to be deaf. I will do what I can but your deafness will increase gradually, though you may never become totally deaf. I can not tell."

*Deaf!* At 21, I walked away from that specialist's office with black desolation in my heart, with bitter rebellion in my soul. Why should I be deaf? I did not *want* to be deaf. I hated deafness with all the strength of my youth. I saw the dreams of a young girl fade into oblivion. I could never get away from the black cloud hovering over me. It mocked and taunted me, with each failure to understand. I fought it with repeated trips to specialists, with operations of various kinds, but there seemed no way out. I withdrew from social contacts, though I could see from the baffled expressions on the faces of the members of my family that they longed to help me. Slowly a wall grew up between me and my friends and acquaintances. I answered advertisements in newspapers and magazines promising alluring cures for deafness. Of course, I received no relief, and with each failure lost more hope. Finally, after 6 years of steadily increasing torment, I was sent to another ear specialist, and the first ray of hope came when he said: "I advise you to study lip reading."

"Lip reading? What is lip reading?" A way out! A way to help myself! I felt hope pouring into my soul. The process of re-creating had begun. It took that otologist only a few minutes to point the way; it changed my whole life.

The life of an otologist is a busy one, I know. Just a few weeks ago I had occasion to visit the

office of one. While I was waiting to see him on work connected with our organization, I watched the patients come and go. I marveled at his gentleness, his interest in each caller, his skilful handling of instruments. Through it all I glimpsed the beauty of your work as physicians. Service, the giving of yourself to a worthwhile purpose, the ministering spirit, the desire to "set at liberty them that are bruised".

Perhaps some of you do not believe in lip reading. I know of a case in point. A young girl was under treatment for several years and yet her hearing gradually became worse. She took up the study of lip reading *against the advice of her otologist* and became a remarkable lip reader. Finally, she was totally deaf. She then became a teacher of lip reading, and one day she went back to her former specialist and told him that she would appreciate it if he would refer his patients with progressive deafness to her. He told her that he would never advise one of his patients to study lip reading. "I am not surprised", she said, "but suppose I had followed your advice and had not studied lip reading. I have lost all my hearing in spite of your treatments. What would I do without lip reading?"

This same girl was present at a medical meeting and sat near the front where she could see the speakers. One of the ear specialists undervalued lip reading in his talk, spoke at length against it, and said that he had never seen anyone who had found it to be of real practical value. The young woman asked if she might speak. She said she would like to prove for the thousands of lip readers everywhere that lip reading was practicable. Then she told the audience that although she had not heard a word of the doctor's remarks, she knew what he had said, and to the specialist's chagrin, she summed up his criticisms of lip reading!

Perhaps many of you in this audience have told your patients about lip reading and hearing aids and our local organizations, and the patients have not been interested. Please do not give them up! There are many different types of hard of hearing people, and though some of them may not welcome suggestions that will help them to help themselves, I believe that a large percentage of them will at least investigate if they are repeatedly urged by one in whom they have confidence.

### The Cooperation of Otologists

When we estimate that there are 10,000,000 people in the United States with defective hearing, we realize that our little Federation is like a David attacking Goliath. But—David was victorious! In this fight to make the world a happier place for hard of hearing people, many otologists have had a glorious part. They have served and are serving as officers and members of the Board of Managers of our Federation; they are also serving in active and advisory capacities in our local organizations.

We are grateful to those otologists who ally themselves with us. They realize that their responsibility to their deafened patients does not end with medical treatment. They study the various types of deafness and know how to deal with the shy patient, or the one who is bitterly resentful, or the courageous one who is trying to overcome his handicap. They show that they want to take a definite part in the social and economic uplift of their patients. They realize, too, that the leagues for the hard of hearing are of service to them.



### How the Leagues Help the Otologists

All otologists have patients they can not cure medically. No true physician likes to tell his patient: "I can do nothing further for you." My sympathy goes out to the physician who is forced by his own honesty to tell his patient there is no hope. The leagues are hope filling-stations. The otologists who are keeping abreast of the times know that these leagues offer helpful advice. They can take the patients whom the doctors can not help and teach them to live happier lives. All of the organizations provide lip reading instruction and social activities. The bewildered, rebellious hard of hearing find sympathy and understanding. They learn to read lips and enjoy social contacts. In many of the larger organizations there are employment bureaus, demonstrations of hearing devices, radios, auditorium wiring equipment, voice training classes, clubs for current events, bowling, nature study, sewing, photography, dramatics, bridge. One league has a clinic for the prevention of deafness.

### Continuing Coöperation

You perhaps have wealthy patients who may find happiness in serving our Federation if you present the matter to them. Our Federation and our leagues need the support of these wealthy, hard of hearing people, who for reasons unknown prefer not to ally themselves with us. Just recently I heard of a philanthropist who left a large sum of money to be spent upon children. Although there were several cases of deafness in his family, his will stipulated that the money should be spent only upon children who were perfect physically! Prominent deafened people sometimes hold themselves aloof from the social work for the hard of hearing. We must get them to realize that the modern conveniences enjoyed by them (wiring equipment in the churches and theaters, better hearing aids, door lights, telephone amplifiers) are the result of organized effort. They are directly benefiting from the work of those who are giving their lives to help the hard of hearing, and they are morally obligated to assist.

You, as members of the American Otological Society, are leaders in your field. In your communities there are doubtless eager young ear specialists just starting out, who must be conservative, who must curb their enthusiasm, who must build up names for themselves step by step. To you they look for approval. Your personal endorsement of a community project means that they would like to have their names associated with it. In many cities young otologists are afraid to ally themselves with leagues for the hard of hearing because you are not allied.

Your professional standing is secure. Your names carry weight. Any league for the hard of hearing would be glad to have your personal endorsement and I am glad to say that many of them have. In one city I visited on a recent field trip, a young otologist told me frankly that he would like to do something to help the hard of hearing, but that if he did he would be severely criticized because he was a newcomer and had to build a name for himself. He said, "If you could get Dr. ——— interested, the others would fall in line, because his professional standing is unquestionable." Will you not make it possible to smooth the way for these younger men?

Unquestionably, you can play a great part in the development of future work. Why do you not demand that no course in otology be considered complete without lecture, reading, and observation courses in the psychology of deafness and social work for the hard of hearing? Could not this Society set in motion the necessary machinery to make this effective? Incidentally, I believe it would add to the value of every otologist if he studied the fundamentals of lip reading!

I have often wondered how otologists select their secretarial assistants. This thought brings to my mind the experience of a personal friend who had an appointment with an ear specialist. She sat in the waiting room, on the edge of her chair, straining to hear her name called whenever the doctor opened his door. It was impossible to read his lips because of the brilliant light behind his back which threw a black shadow over his mouth. She dared not read more than a few sentences at a time in her magazine before peering up again. Finally, after 2 hours or more, she went across the hall to the secretary to ask about her appointment. She was told very tartly, "Dr. ——— has called your name twice. I heard him all the way in here!"

This contact between the office and the patient is an immensely important one. A friendly, understanding secretary who will step over to the deafened patient and attract his attention inconspicuously, will create a helpful mental attitude. Every one employed in an otologist's office, in an ear clinic, in organization work for the hard of hearing, should know how to deal with hard of hearing people. We have a right to expect courtesy and consideration in the places we naturally turn to for help with the problems caused by our deafness. I believe it would be valuable for local otologic societies to arrange for "round tables" for the secretaries of their members and the workers in the local leagues.

You have many affiliations and they absorb your time and your money. And yet, because I believe so sincerely in the bond between the otologist and his patients, I do hope that every member of this Society will become a member of the Federation. Membership not only helps our work, but includes a subscription to our magazine, *The Auditory Outlook*, the only magazine for the hard of hearing. Place that magazine on your waiting room table and it will speak for itself. Who knows but that an article, read while the patient is waiting for your scientific aid, will give him renewed hope and make him feel, as my doctor friend made me feel, that life can be worthwhile after all?

Though our Federation has accomplished much in the last 12 years, there are untouched fields before us. We want to form 400 leagues within the next few years, and we shall need the help of all of you. You doubtless have contacts with ear specialists in every city in the United States. Any influence you can bring to bear on the individual and collective coöperation of these men will hasten the day when hard of hearing people everywhere will study lip reading, use hearing aids, and enjoy again the contact with their fellowmen.

Our Federation is pledged "to improve the conditions of and offer relief to persons whose hearing has been lost or impaired". That is your pledge as otologists, too, is it not? Can we not keep the pledge together?

## Current Events

### SEVENTH ANNUAL CONFERENCE OF COUNTY SOCIETY SECRETARIES AND REPORTERS

Trenton, New Jersey, November 4, 1931.

The Conference convened at 11:20 a. m. at the Carteret Club, Trenton, on November 4, 1931, and was called to order by the President, Dr. George T. Tracy, of Beverly.

The roll was called by the Secretary, Dr. A. Dunbar Hutchinson, showing the following members and guests present: John F. Hagerty, Newark, President of the State Medical Society; George T. Tracy, Beverly, President of the Conference; A. Dunbar Hutchinson, Trenton, Secretary of Conference; J. B. Morrison, Newark, Secretary State Medical Society; H. O. Reik, Atlantic City, Executive Secretary State Medical Society; Frank G. Scammell, Trenton; Harry R. North, Trenton; Howard Eastwood, Burlington.

Atlantic County: John Irvin, Atlantic City.  
Bergen County: S. T. Snedecor, Hackensack; Charles Littwin, Englewood.

Burlington County: Joseph M. Kuder, Mount Holly; R. I. Downs, Riverside.

Camden County: E. G. Hummel, Camden; R. S. Gamon, Camden.

Cumberland County: Elton S. Corson, Bridgeton.

Essex County: Frank W. Pinneo, Newark.

Gloucester County: I. W. Knight, Pitman; Henry B. Diverty, Woodbury.

Hudson County: Harry J. Perlberg, Jersey City; E. G. Waters, Jersey City.

Hunterdon County: Barclay Stokes Fuhrmann, Flemington.

Mercer County: Nathan Swern, Trenton.

Sussex County: Frederick H. Morrison, Newton.

Union County: H. H. V. Hubbard, Plainfield; George W. H. Horre, Elizabeth.

The minutes of the last meeting having been published in the Journal, motion was made that they be accepted as published; which motion was seconded and duly carried.

The President called upon Dr. Hagerty, President of the New Jersey State Medical Society, to give the usual convocation for the Conference.

*Dr. John F. Hagerty (Newark):* It is a very great privilege, to open a meeting of this kind, which promises to be a very interesting and instructive one. The more familiar I become with the many activities of the State Society, the prouder I am and the greater elation I feel in having been called to preside over such a group of active, earnest and intelligent workers as there are in our Society.

Your President, in his prospectus, has referred to the efforts of organized medicine toward the prevention, control and cure of disease. I might add that these efforts have been very successful and that we are amply justified in appealing to the public for support because of the magnificent accomplishments of organized and of scientific medicine.

I take it that this meeting is intended to lead the profession into a discussion of the advisability of advertising what organized medicine has accomplished, and I think we are fully justified in proclaiming to the world the aims of scientific medicine. If we just recall the countless thou-

sands of lives that have been saved, the millions of dollars worth of property salvaged; and if we reflect a minute upon the sum total of human misery that has been alleviated; I think we are amply justified in proclaiming those facts to the public and in looking to the public and to the legislators for approval of any steps that we might wish to take. I may say that in my official visits to the various county societies, and in talks to lay organizations, it has been my ambition to make plain to the general public, and to those who have in a way our destinies in their hands, just what organized medicine is doing for the people, and has always been doing. Every effort of our profession has for its ultimate object the improvement of the condition of the people at large. I think the subject of *publicity* is a very justifiable one for a group of men like you to consider and to proclaim.

I do not know just how far the question of advertising has gone, in the minds of the projectors of this meeting. In individual advertising, I have myself always been bound by the tradition of medicine against self-exploitation; and yet, I have often wondered if we do not lean too far backward in our efforts to be conscientious and scrupulous about matters of that kind. While not advocating self-advertising, I sometimes wonder if we are not a little too tender and too generous and too scrupulous in our attitude toward well-known offenders against some of the tenets of good medicine. There are some bad doctors, some irresponsible and some illegitimate doctors; not many, fortunately. It is a splendid thing that there are so few among the rank and file of the profession, when we consider the temptation to diverge from the path of rectitude. But, we all know some men in our communities, who are not honest and straight, and who are doing illegitimate and dishonest things, and yet we hesitate to proclaim that fact. I wonder if we have not gone a little too far in that respect; wonder if we should not make known the fact that there are such men in the profession and attempt to punish them?

I do not know how far you intend to go, in advertising to the public our claims, so I shall be very much interested in what transpires at this meeting.

*Dr. Tracy:* The regular program for this session opens with a paper by Dr. E. G. Waters, of Jersey City.

#### SOMETHING FOR REPORTERS TO REPORT

##### A Plan for County Society Control of Periodic Health Examinations

Edward G. Waters, M.D.,  
Jersey City, N. J.

In presenting to the medical profession this plan of periodic physical examinations, I do not attempt to advise physicians, as individuals, how to handle their patients and business, but merely as a practical plan to meet serious and unfair competition, and to offer something of real value to "our public" as a whole, and a plan which must react favorably for the physician. It can be characterized even as a measure to restore to us that degree of public confidence which our more vindictive critics believe we have lost. While this plan has been fomenting in my mind, I have heard myriads of complaints and many papers about medical economics, but a paucity of practical advice or definitive suggestions. The thought has resolved itself into a form which I believe is ap-



plicable to the vast majority of communities in this country, with but few alterations. It is designed as a definite form of relief to both physician and layman, a form of protection which must be beneficial to both. For purposes of clarity and reference, I have divided the plan into 4 major component parts, which I will now present in some detail:

(1) The adoption of a form of procedure for periodic physical examinations with delineation of minimum requirements for the examining doctor to meet. This is obviously the keystone. Any examination of this sort must be thorough and complete. A cursory examination of the heart and lungs, often through a half-unbuttoned shirt, is not worthy of a name. Likewise, every thorough examination of the heart and lungs, but neglecting, for example, a rectal examination, lacks completeness. The patient must be stripped and prepared for a complete examination; half-way measures are not sufficient. No examination is adequate when the majority of the examinee's figure is enclosed in a business suit or fancy dress. To remove haphazardness and prevent omissions, a form of procedure is planned which can be carried out. It constitutes a written list of examinations to be made, from head to foot, but lists only those which any practicing physician should be competent to make. It does not include special examinations, as for example, a retinoscopic or sigmoidoscopic examination, but would include visual eye tests and a finger rectal examination. When special examinations are required, as for example retinoscopic, sigmoidoscopic or cystoscopic, it will be feasible and highly practicable to refer the person to qualified men, such examinations to be part of the general examination and in no sense to constitute a "consultation"; and the individual may thus be assured of a thorough and adequate examination, with "reference" but without "consultation". The specialized examinations will, of course, add to the charge made, if the examinee follows the general examiner's advice, but he knows in advance why they are requested and what the extra work entails apart from the regular form of examination.

A definite form of procedure ensures completeness when the examination is over, and warrants a fair search for possible defects. It by no means ensures accuracy or perfection, which the physician's competence alone can give, but since the consultant's work in medicine consists ordinarily of some examination which should have been done but was omitted, the careful following out of a good form of procedure will ensure the elimination of omissions.

(2) The adoption of a standard fee for the community.

It is imperative for the success of such a plan that a fee be charged which is not only compatible with the ability of the average examinee to pay, but which is also standard among those physicians who enroll as county medical examiners in given communities. The fee must at least meet, or better, that charged by lay controlled groups and clinics operating for gain. It must be unalterable by the physician and include all that the standard form of procedure delineates. In addition, there must be definitely known charges for any additional examinations, such as x-rays and blood chemistry, and these must be compatible with the scale of charge for the entire examination. If such a plan is to succeed, the examinee must be given all he needs to warrant thoroughness and completeness in examination and diagnosis, but his finances must be conserved and we must not per-

mit him to be mulcted through numerous incidental examinations. There are plenty of good x-ray and diagnostic laboratories which will be only too willing to cooperate in this work, and furnish service at less than standard rates.

(3) Publication of a list of members of the County Society of the district, indicating those members willing to give the examination at the standard fee.

The public must be apprised of the adoption of such a plan, and must know what physicians are available for making examinations. To avoid any possibility of confusion as to medical standing, the entire roster of the county society—which means the roll of men acceptable to the medical brotherhood—should be published. However, as plan-acceptance is elective with our Society members, such published lists should clearly indicate those men who are willing to make health examinations, as contrasted with men in good standing who neither subscribe to the form of procedure nor the standard fee.

Publication of such lists will prove of material assistance to the county societies. The public will be enabled to ascertain the identity of medically eligible men. Many able practitioners who for various reasons do not join their county's society will be forced to do so to maintain their professional standing in the eyes of the public. Illegitimate practitioners will find the going harder, and twilight practitioners will be refused the light of community acceptance. A reference list of competent physicians will be available in emergency. Physicians will profit individually and as a group, for an ethical type of advertising is then available. The public will profit vastly from the opportunity to distinguish the medically acceptable from those who are not, and through elimination of the undesirables in medicine.

(4) Publication of the detailed form of procedure. The public at large does not know what a complete medical examination means. The average person knows that for a cold his chest is examined, and for a sore throat his nose and throat are gone over, but he has seldom, if ever, gone to his physician for a complete examination when he was not sick. This fact, doubtless accounts in large measure for the reputation of completeness and thoroughness acquired by lay-controlled clinics specializing in health examinations. A patient visiting the office for treatment of a head cold, or sebaceous cyst of the scalp, would think it very queer if the doctor tested the ocular movements and reflexes, took the height and weight, looked in the ears, tried the patellar reflexes, and so on; but the same patient, subsequently taking a routine physical examination at a clinic specializing in such examinations, would doubtless widely advertise the thoroughness of the going-over he received. He would often compare critically his experience with his visits to his own doctor. Such a patient ignores the truth of the matter which is, that he never went to his doctor for a complete examination when he was not in fact a *patient*. But if he *had* gone to his doctor for a complete examination, would he have received one? And if he had, how would he know it to be adequate and thorough? In my opinion, the public should be acquainted with what may reasonably be expected in a complete examination. If people know what is due them, the examining physician must render it to them. If examinations be not thorough, the people will then soon know it and the physician will suffer in consequence. The form of procedure must be broadcast, and copies of the form made available on request; and it will not take the average American citizen long to learn

exactly what to expect for his money, and we may be sure that he will see that he gets it.

In addition to the "4 major component parts" detailed above, there are numerous factors of less importance, but which require some consideration. I hardly need mention the value of the plan to the public, in early detection of conditions which may become of serious import if neglected. Likewise, I need hardly detail the value of the examinations to the physicians who detect defects which require attention and treatment. Then, however, the Medical Society must police its own organization, or have it policed for them, to insure patients against unnecessary and expensive follow-up treatments by the occasional commercialized or dishonest examiner.

When the examination is completed, the patient should be given a *written report* on the examination, with notation of defects which require attention. The detailed record of the examination is to be held and filed by the examiner. However, if the patient decides to take treatment elsewhere, a copy of the complete record of the examination must be forwarded to the doctor treating that patient should he request it. This is proper and ethical and cannot fail to materially increase confidence in our efforts along these lines.

In conclusion, I believe the publicity associated with this plan will be a strong welding bond between physician and layman. The public is entitled to know the names of competent physicians willing to give adequate health examinations for a set fee. The public is also entitled to detailed knowledge of the content of adequate health examinations. Education along these lines cannot help but make for better service to patients, and cannot help but make the average physician better in respect to details and completeness in his work. There is bound to be an increase in the confidence and respect of the public toward physicians as a group in a move which is so clearly for their betterment. The county society may thus become a real factor in the promotion of public health plans and in the protection of public health by the endorsement of means for bettering medical practice.

I have not discussed in detail the relationship of physician to patient, advice for treatment, disposal of examination forms, reference of patients elsewhere, care of laboratory and x-ray needs, etc. I have rather definite ideas upon these matters, but the one of prime importance at first is to pass upon the value of the plan itself. When the major issue is decided, the lesser ones are easily dispatched.

#### DISCUSSION

*Dr. H. O. Reik* (Atlantic City): May I add to what Dr. Waters has said in explanation of his plan, that he and I have talked this matter over several times. He has devised a workable plan which I think will be acceptable to the profession in general. The State Society owns a reel of moving pictures depicting the procedure of a complete physical examination, but it is defective in several respects and it is not as feasible for use in the county societies as a film prepared on the smaller, 16 mm. size, machine might be. In connection with his plan of instruction to the examiners we are now ready to proceed with the making of a picture, and as we have the apparatus, both for taking the pictures and for exhibiting them afterward, it is hoped that we can get up a satisfactory reel of movies, in a form to be duplicated, if desired, for use by the county societies. We now have in mind, although not definitely finished,

the scenario for that picture and I hope we may be able to get to work upon it in the very near future.

*Dr. J. B. Morrison* (Newark): Dr. Waters has presented the most practical plan for periodic health examinations that I have ever listened to. I think he should be invited to present this at the Annual Meeting of the State Society and that body should be asked to finance establishment of the plan.

Motion was made that it be recommended to the State Society that some such plan be adopted for the control of periodic health examinations. This motion was voted upon and carried, and Dr. Reik volunteered to look after this matter.

*Dr. Elton S. Corson* (Bridgeton): If there is no further discussion on this project, I would like to introduce another subject regarding examinations of a different character. In our county, our profession has been ridiculed, to a certain extent, in the matter of examining drunken drivers. It seems to me that the State Society should establish a uniform method for examining alleged drunken drivers. Of course, if there could be an *official examiner* in each locality, he might set some standard, but in our locality, in an emergency, various physicians may be called in, and as there is no definite plan of examination, when the case goes into court we may be subjected to ridicule because of the indefiniteness of testimony.

Dr. Aiken got up a form, based on a communication in the A. M. A. Journal, outlining features which should be covered in an examination. He made out a schedule, which he gave to our police commissioner, arranging it so that a duplicate could be made, one copy left with the Recorder and the other kept by the doctor so that when he appears in Court he can give accurately, details of the examination made on that particular occasion. Dr. Aiken, having forgotten some of the facts in a certain examination, was brought into ridicule by the opposing attorney and had to appeal to the Court for protection. However, there seems to be no protection when an attorney is determined on winning his case. Dr. Aiken was, as a result of this procedure, very much chagrined. It seems to me that this subject should be taken up and a uniform procedure adopted, so that a physician having to appear in Court would be able to substantiate his evidence by the record of a uniform examination.

*Dr. Tracy*: Regarding Dr. Corson's suggestion, to provide a uniform method for examining drunken drivers, has this Conference any recommendations to make?

*Dr. F. H. Morrison* (Newton): I feel that this would be very desirable, especially in small communities where probably a driver has been examined by one man and pronounced "drunk", and another Doctor later declares him not intoxicated, it is an embarrassing situation for both physicians. I do feel that some definite standard should be accepted which would be of great benefit to the examining doctor.

*Dr. Corson*: It seems to me that there are 2 aspects to this question of examination of drunken drivers that should be considered. In the first place, the legal aspect. In the case which I have previously cited, the Judge had no standard by which to determine the testimony of the doctors, consequently, he dismissed the case. Now, this is



a very serious condition in our Court. We have had 3 instances where the drunken drivers have been freed because there was no standard testimony on the part of the doctors who made the examinations, and the doctors have been ridiculed. These cases are determined in the police court as drunken drivers and are referred to the higher court for trial, where all the testimony of the doctors is verified. When the case is presented to the Judge he has no standard in mind by which to judge a drunken driver and when 2 doctors testify differently there is confusion and the Judge throws the case out of Court. That has been done on 3 occasions when it was known widely that the driver was intoxicated.

Dr. Frank G. Scammell (Trenton): I don't know whether I have been misinformed or not but I think the legal standard is whether a man has had 1 drink. That is the standard which the law holds all over New Jersey; that if a man has had 1 drink, that indicates intoxication.

#### PUBLICITY A REMEDY FOR MANY SOCIETY PROBLEMS

Roscius I. Downs, M.D.,  
Riverside, N. J.

It is a pleasure to be here, I assure you, if for no other reason than because my friend, George Tracy, asked me to come. He has worked hard and long on this program, and says that the kick he will receive from the success of this meeting will pay him for all the labor he has given. Dr. Tracy's desire is to get the different angles on the subject of public relations. In considering the subject one naturally goes back to the thoughts contained in an address by Dr. Ross 2 years ago to this group.

In Burlington County we have done quite a little publicity work, more during the past year than had been done in any previous year, because of the excellent leadership of our President, Dr. Kuder. He has given this subject a great deal of thought, as his contribution to the Society's development, and I can assure you of a treat today when we shall listen to Dr. Kuder's paper.

While reading over Dr. Ross' paper, 2 problems presented themselves to me: (1) General practice has changed, and is continuing to change, from the treatment of disease to the practice of disease prevention; (2) that the medical society must educate its physician members to solve this problem. We all know of instances, here and there, where the general practitioner has not changed; having so practiced for many years, he continues to consider only the treatment of disease. His typhoid patients disappeared; more recently his diphtheria patients have disappeared; and so, also, have most of his gastro-intestinal patients; and he now has difficulty in meeting his obligations, and becomes cynical, considering that the practice of medicine has failed him.

What should be the ideals of a physician? I think they should be based on progress and co-operation. Certainly, a physician should consider well the trend of the times and where progress is leading, and then get behind such problems and push them along. They will continue to progress, whether we get behind them or not, but it is necessary for us also, to be progressive. Physicians should coöperate with Boards of Health, as they have done in the matter of diphtheria extermination. They should coöperate too, with the tuberculosis leagues and other such organizations. School medical examinations constitute a problem which is becoming more important all the

time, and which is also becoming very definite. We should develop periodic physical examinations and, in that connection we should ourselves be physically examined periodically. If we cannot take care of ourselves, we are not capable of taking care of others. We should get behind our local hospitals, because more people are asking for hospitalization now than ever before, and there are many problems in that field to be solved. These doctors should take post-graduate study whenever opportunity permits. I feel that we should also join local civic clubs—Kiwanis, Lions, Rotary—and there become more intimately acquainted with our neighbors. We should welcome into our fold every young physician; he is not going to take all our practice from us, and we certainly haven't time for petty jealousies.

With such an attitude toward people and affairs, we can together form a useful medical society which will become the natural body for consideration of the most important community problems.

#### PUBLIC RELATIONS AS A SPECIFIC

John S. Irvin, M.D.,  
Atlantic City

When Dr. Tracy suggested, by telephone, the title for this paper, he did not elaborate on what it meant. I looked up the word *specific* in a medical dictionary, and among other definitions found the 2 following which might apply: (1) "a remedy peculiarly indicated in or specially curative of a given disease"; (2) "produced by a single definite or peculiar cause and usually exhibiting special characteristics". If we use the second definition we must look upon public relations as an effect of some cause. What could that cause be? Well, it could be the growing dissatisfaction of the public with the profession, as evidenced by criticism in lay journals and by efforts of lay agencies to invade fields we have previously looked upon as our own; coupled with a growing dissatisfaction of the profession with the public, as evidenced by our feeling that we are in danger of losing our place as leaders in conservation of the health of the nation, and by the fact that the public seems ever ready to turn to quacks and charlatans. In other words, I believe that our efforts to improve relations with the public have been forced upon us by the growing consciousness that they need improvement.

Our first definition was that "a specific is a remedy peculiarly indicated in or specially curative of a given disease", and that means we must define our disease before we can discuss the efficacy of our remedy. I take it that the disease is, again, the present dissatisfaction of the laity with the practice of medicine as conducted today; the feeling that they should get something better for their money. We, on the other hand, feel that many times the public is at fault. We know that many people are easily and continuously led astray by quacks and cultists whom they do not clearly differentiate from real members of the medical profession. And, rightly or wrongly, this feeling of antagonism is being constantly encouraged by articles in the lay press, most of which are sensational and inaccurate, but some of which justly criticize the medical profession.

Let me say right now that *I do not believe that publicity is the specific for this disease*. When the public demands relief from the costly performance of being shunted from specialist to specialist in the search for a diagnosis, the cure is not *publicity*. But, some system of coöperation within the profession should secure to the sick individual the

advantages of modern, scientific diagnosis and treatment, at a price within his means. One suggestion is that this makes necessary some further extension of group practice.

This question of *specialism* brings up the subject of continuing education of the doctor. We do not need more specialists; but we do need better trained practitioners who can manage the majority of illnesses without recourse to specialists. Attempts have been made to supply this need, as in the post-graduate lecture courses given by Rutgers University and the State Medical Society during the past few years. In Atlantic City, we have conducted a series of "clinic nights" at the Atlantic City Hospital, open to the profession at large. While these were good, and moderately well attended, they were only given for a short time, and for the last 6 months seem to have been entirely forgotten.

When we give a few lectures and clinics, we should not pat ourselves on the back and say "now that problem has been solved", for that would not be true; some surer method will have to be devised. The up-and-coming man may keep abreast of the times by reading, visiting in large medical centers and taking post-graduate courses, but there is a big temptation to do only the routine work, which often is exhausting and leaves one disinclined to further serious study.

While we cannot go back to the "good old days" when the family physician treated all members of his families from birth to death, with a faith in his infallibility which we would not dare assume, we can, by broadening our knowledge of the causes and treatment of disease, help stem the rising tide of specialism which treats a nose and when the foot that brought that nose to the office gets sick sends it to his orthopedic friend down the street, and which pretty well ignores the human being who owns both nose and foot.

Though I have said that "public relations" is not the specific, I realize its importance in solving our problem of mutually satisfying the public and ourselves. We in Atlantic City have done far less than we should. Aside from health supervision and instruction in the public schools which is, of course, of prime importance, and the activities of our health department, we have broadcast Health Talks by radio, and occasionally reported our medical meetings in the local paper. That is not enough. I realize that other societies, notably that of Bergen County, are far ahead of us. Too little has been done by our society to popularize periodic health examinations; our one big endeavor having been the annual demonstrations at the County Fair, at Egg Harbor, conjointly with the Atlantic County branch of the Tuberculosis League. Most of those who come to us privately for such examinations have probably learned about them from the publicity of such organizations as the Life Extension Institute. Even that publicity does not always attract the right individual, for while conducting examinations for the Life Extension Institute, in Atlantic City, I found that many came for the examination because they were actually ill and wanted diagnosis or treatment, not because they wished to avoid future troubles.

In closing, permit me to say again that while I think that wider publicity is necessary to acquaint the public with facts that should be known concerning prevention and treatment of disease, we will not solve our problem until we offer skillful treatment, at a more reasonable price, to all the sick and at the same time assure to the practitioner an adequate living for himself and his family, and protection against poverty in his old age.

# A FEW THOUGHTS IN THERAPY FOR AILING MEDICAL PRACTICE NEITHER NEW NOR OFFICIAL

Harry J. Perlberg, M.D.,

Jersey City, N. J.

Our position here brings to mind the story of the 4 deaf bridge players: the first player opened with "3 spades"; the second bid "2 hearts"; the third "1 club"; and the fourth man said—"As long as everyone else has passed, I'll pass too, although I've got a good hand." Gentlemen, we've all got good hands, too—namely, our calling—but we're just as deaf to the calling of our times as the deaf men in the card game. What is this "handwriting on the wall" about which we hear so much? The subject of medical economics! The American College of Surgeons, at the recent convention, did not discuss only the latest advances in surgery; the paramount issue appeared to be to find the answer to the problem: "How is the medical profession to survive?" We have been satisfied to sit complacently, smug and self-content, feeling that we were too strongly entrenched and too highly enthroned to be touched by the problem of economics. We have gone past the stage of prophylaxis—we have lost opportunities never to be regained.

The laborer, the mechanic, and others of their type, have seen to it that their interests are protected; but we, riding high in an intellectual and social strata, have permitted the chance to go by. We, who guide the health destinies of our patients, who know just what to do for any grave surgical or medical condition, flounder helplessly around in the great economic sea wondering, wishing, hoping, but doing nothing. We hear about abuse of medical charity, the busy free clinics, the taking over of treatment of patients by Insurance Companies and industrial institutions, and many similar matters—all important and, unfortunately, too true. Yet, what have we done to eradicate these evils—to help ourselves? A committee, on which we are represented by the American Medical Association, is making a 5-years' survey, but by the time it finds out what should be done, I fear there won't be anything to do it to. The people will become so accustomed to receiving medical service free, that they won't come back to us. With medical centers springing up all over the country, offering facilities for both in-patients and out-patients with which we cannot possibly cope, at rates from nothing up—in fact, vying with each other as to which will do the most for the least cost to the patient—and the profession is helplessly in the middle and cannot get out. There doesn't seem to be any use fighting those clinics, directly. They are run by municipal or private organizations strongly supported financially, and our puny efforts would be of no avail. What, then, remains for us to do?

These are days of competition—great competition—not alone in business but, as well, in the professions. The public is attracted by the best dressed window or by that establishment which offers most and best per dollar. Gone are the days when we, as members of the greatest and most glorious profession, could afford to disregard the *business side* of medicine. If we wish to be honest with ourselves, we must realize that we are no longer practicing medicine as it was practiced a decade or so ago, that we are *selling* medical knowledge—whether you like the term or not. Not that I am thinking of the commercialization of medicine; I would give short shrift to any members of the profession who indulge in any one of the many practices frowned upon in our code of



ethics. But I still insist that the public will *buy*, if I may be permitted to use that term, where they get the most and best for the price.

It is needless to deny that *medical centers* can give the patient *most*—but do they always give the *best*? Dollars and cents, handed out by municipalities and well-endowed corporations, do not always buy the *best* in *brains* or *service*. Service—that's the big word—that is what appeals to the vast majority of the people. Our individual offices may not be able to compete with the material advantages of the clinics, but the clinics cannot deliver the *type of service which we as individuals are able to offer*. How often have we heard comparisons of different doctors—how one man was so careful, pains-taking, methodical, thorough? Will the public receive such consideration best in a clinic, or in your own office? The answer is obvious.

Now, to get to the bottom of things, we must first begin to remedy the situation by *cleaning house*. We must readjust ourselves to present conditions. We must *sell* ourselves to the public, and regain the public's confidence. How shall this be done? Here lies the problem which must be solved. The public is not entirely willing to be pauperized, if that can be helped, and *we are in a position to help them*.

In the first place, we must be tolerant of the old, faithful patient, who has always made good, but who now, owing to reduced circumstances, is unable to pay for service as formerly. I say: Carry him along, make him feel welcome to your aid, trusting that the future will restore him to your pay-list; instead of driving him to the clinics, lest in getting a taste of clinics will stick to them even though his financial condition is eventually bettered. Remember that the public is readily impressed by elaborate staging. I recently heard a suggestion, to the effect that doctors might run a *clinic office hour* in their own private offices at \$1 per visit; this hour being devoted to people who cannot afford to pay the full office fee but wish to give something for better than clinic service at the hands of some intern or inexperienced practitioner. I believe that is a splendid idea. We all give freely of our time to clinics and hospitals, for no return whatever. Why not take some of that time, turn it to our own advantage by giving such people care that is worthwhile; incidentally receiving *some financial return* and, what is very important, keeping those people within the fold of private patients and away from clinics.

Some doctors say that they would rather attend 5 people a day at \$5 each, than 25 people at \$1 each. I believe that idea is wrong in principle—especially at this time, when it is necessary for all physicians to work toward a common end, the elimination of the clinic evil. I would say: *Have a pay clinic in your own office*.

Another complaint on the part of the public, is the *high cost of specialist service*, and that unfortunately, is too true. Many physicians make the mistake of referring patients to hospitals for special treatment. That is a great error, because it initiates the patient into the great circle of the clinic, with its varied facilities, so that the next time he needs advice, he starts right off at the clinic.

I am not prepared to state that group practice, *per se*, is the remedy for this condition. It works very successfully in the middle-west, west and south, but I don't believe that it would be practical in our own localities. However, this procedure might be employed in a modified form, in the fol-

lowing manner: Every physician has certain specialists to whom he refers his private work, and I am sure that those same specialists would be more than willing to coöperate by cutting their fees for a certain type of patient; arrange for a nominal fee, for specialists with whom you have been working, to be charged to such patients as are designated by you as, for example, *special*. I am sure that the patient would be only too glad to go to a specialist's private office, knowing that he will receive individual instead of mass service, at a fee within his means. The motive behind this is, simply—to keep the patient in the realm of *private practice* and within the ranks of the profession. I know of no better way to keep this type of patient away from the free clinics. By a proper co-ordination of all the resources at our command, we should be able to control this matter.

The question may be raised—how will the public be made aware of this plan? So, the question of advertising next comes to the fore. Within the past 2 years much has been done to withdraw the curtain of mystery from between the public and the profession. Not by individual advertisement, of course, but by radio broadcasts and newspaper advertising under the auspices of recognized medical organizations.

Hudson County, during the past spring, waged a vigorous and, we believe, a successful campaign for prophylactic diphtheria inoculations, using the press by means of paid advertisements. The newspapers helped along by frequent editorials. A special rate of \$6 for the 3 inoculations was agreed upon by the members of our society, and immunization was so advertised. I know that the response was most encouraging. We now intend to go ahead on a plan of boosting periodic health examinations, each to be made by the patient's own private physician. We believe that this should also prove successful, but it must be borne in mind that the patient must receive a bona fide examination, and not a cursory physical inspection. Permit them to learn the difference between a hurried, slipshod looking over, and a really competent, physical examination, from hair to toe-nails, and the people will remain or become our friends, instead of regarding us with suspicion, as is so often the case now-a-days.

Finally, members of the profession must realize that it is necessary to work together, not only for the interest of the patient, but also for the good of the profession. We must also assume leadership; otherwise, we will soon be in a position where we will be compelled to obey commands. Delay is dangerous. The old adage of united we stand and divided we fall, has never been more significantly employed than in the present situation. Let us have less talk, and more action, before it is too late.

#### IS GROUP MEDICAL PUBLICITY ETHICAL?

Robert S. Gamon, M.D.,

Camden, N. J.

The question of group publicity being ethical is a very important one because I am sure that each separate county society has had an opportunity to decide what *ethical* means in the way of advertising. There has not been, until recently, a definite standardization as to what is ethical and what is unethical for the medical group. The New York State Medical Society and the New York Academy of Medicine came out last year with a very definite plan to guide the Committee on Publicity. That was published in the October 24 issue of the A. M. A. Journal, with very favorable

editorial comment. I feel that we, as component parts of the Medical Society of New Jersey, should follow along in this respect with New York. Last year a Public Relations Committee was tried in our County Society, with the hope that we would be able to accomplish with numbers what we could not as individuals, but not much was done. This year we have a different committee, but some members still feel that they have nothing standardized as to what is ethical. In New York they have gone into the individual's relations, what certain individuals should not do. For instance, a picture of the man who "has just returned from Europe", they have decided, should be deleted; in radio talks, the man's personality should be submerged; any remarks made in broadcasting should first be approved by the Society; papers read before the Society, endorsing any project, should not be in any way an advertisement of the man reading the paper. Regarding relationship of a physician to an article published in the paper under his name, it was decided should be submitted to the Public Relations Committee before being published. Therefore, whatever is said by the physician must be approved by the Public Relations Committee and have the backing of the Society. The printed advertisements give the name of the man who wrote the article; a very definite step forward.

#### LOCAL COUNTY MEDICAL SOCIETY PUBLICITY

Joseph M. Kuder, M.D.,  
Mount Holly, N. J.

Perhaps it is superfluous on my part to point out to you that except for the Spartans in the ancient Greek Empire, there has probably never been a period in the history of the world when the public has been as health-conscious as it is today. The truth of this assertion is readily discernible in the trend of modern magazine advertising, where commodities, in so far as they lend themselves thereto, are almost invariably advertised in terms of health units, rather than in units of utility, or of beauty of form, color or taste. For instance, you are urged to take a certain substance, not because it tastes good but because a teaspoonful of it contains as much *vitamin D* as 16 pints of milk, a lot of butter, and a whole flock of eggs. You are asked to eat certain foods, solely because they contain more *calories* than do other foods. The advertisements do not state that these commodities taste good; they make no apologies if they taste bad. You are not asked to *like them*, you are told to take them *because they are good for you*. You are urged to buy this or that type of sun or therapeutic lamp, not because the light is more beautiful than that which emanates from other lamps, but because its rays are *beneficial for you*. You are urged to put a certain type of glass in your window frames, not because the glass is more indestructible than other glass but because it *admits the ultraviolet rays* of the sun. You are invited to sleep on a certain brand of mattress, not because the pattern of the covering is more attractive but because you get *more units of rest per night's sleep*. You are advised to drink coffee from which the caffeine has been removed, not because it is more delicious but because it is *better for your nerves*.

The trick in advertising being to attract the attention of the public, and the expression of these advertisements being in terms of health, demonstrate the fact that the manufacturer realizes his best approach for dispensing his commodities to the public is through the medium of *health ap-*

*peal*; for it is perfectly obvious that no manufacturer would for one moment consider advertising his wares in terms or which did not interest the public. It is thus that advertisers are now-a-days utilizing medical terminology such as *halitosis* and catch-phrases such as *athlete's foot*, in endeavors to pique the curiosity of the public by suggesting the mysterious.

There is no reason to suppose, however, that a majority of these advertisers, in utilizing medical terminology, are primarily interested in bringing about a closer *rapprochement* between physicians and the public; but, consciously or unconsciously on their part, they are contributing to that end. Other advertisers, in order to bring their merchandise into a wider buying market, are frankly encouraging the public to consult physicians more frequently; witness the efforts in this direction for the past few years on the part of one of the foremost manufacturers of gauze, bandages, adhesive tape and other surgical supplies, as well as the health publicity campaigns emanating from a number of the Life Insurance Companies. The recent Sunday night broadcasting on health matters, sponsored by the largest manufacturer of photographic equipment, can scarcely be expected to sell more cameras and camera films; but it is equally obvious that diseases in their incipient stages present the most difficult of diagnostic problems, and it is under these circumstances that more x-ray films will be utilized than in the more advanced cases of disease, where diagnosis by the ordinary means of inspection, palpation, percussion and auscultation, make x-ray studies more or less a superfluity.

Be these things as they may, the fact remains that advertisers are, consciously or unconsciously, directly or indirectly, playing into our hands, and that we physicians are deriving a large measure of publicity for which others are paying, and which we could neither ethically nor financially undertake ourselves. Nor is this public health interest, which the manufacturer is playing to the limit, confined to a perusal of advertisements. It finds expression in newspaper articles on health and disease, appearing in every issue of the more important metropolitan dailies. If any unusual medical procedure is undertaken, or any unusual surgical operation performed, such as the removal of an open safety-pin from a baby's lungs, the news is broadcast on the front page in type just as large and immediately alongside the day's most sensational murder mystery. Naturally, the medical profession does not welcome such notoriety—as a matter of fact it does its best in the way of discouragement—but it does prove one thing, i.e. that editors of newspapers realize the public is as much interested in health news of that type as it is in scandals of the more lurid and indigestible type.

Disgruntled patients are blaspheming the medical profession and the high cost of hospitalization in an unbridled orgy of magazine articles, much to the glee of a public prone to believe the worst rather than the best, and incidentally to the financial aggrandizement of the authors. Medical societies, medical schools, public health institutes, civic organizations, and the like, each year are giving courses of lectures on health matters, which are attended by the laity to the capacity of the auditoriums. Some people rob themselves of a complete night's rest by getting up to the tune of an alarm-clock and indulging in violent setting-up exercises, in the fond belief that such a procedure is beneficial. Others engage in different chimerical endeavors to find an elixir of youth, or a syrup of



life to the tune of a veritable symphony of fads, fantasies, and fallacies.

Now, all of this proves that the public is going to get information on health matters whether or not we assist them to do so. It can get this information only from 2 sources—from quacks, charlatans, and others of a like ilk; or from physicians. And who, may I ask, might more logically be expected to inform the public on these matters than the physicians to whom the public naturally turns for help in time of illness? I know of no challenge ever cast at the feet of any group of individuals which surpasses that of the public to its physicians.

What are we going to do about it? Well, the Burlington County Medical Society is very sympathetic toward this endeavor on the part of humanity to find a happier and healthier place for itself in the sun; and as a gesture of good will, and as an indication of its desire to coöperate, has appointed a Committee on Public Relations and Information. This committee is prepared to furnish a speaker at any time, at any place, on any question of public health, or any reasonable request, made by any responsible lay organization presented to the secretary of the society. Furthermore, this committee is promulgating a series of free public lectures on health matters, to be given during the coming autumn and winter months, by members of the Burlington County Medical Society, in as many towns and communities throughout the county as shall express a desire to have such a series of lectures. It is our endeavor to educate the public to look to the County Medical Society as headquarters for health information.

The purpose of these lectures is certainly not therapeutic. We do not expect to tell Mrs. Jones what to do when Mary gets the measles, but we do expect that after the lectures she will understand that she had better have her doctor help keep Mary from getting bronchopneumonia. We do not expect to tell Mrs. Smith what to do if she discovers uterine bleeding some years after her menopause, but we hope that she will imbibe enough knowledge from the lectures to go and see her physician about it.

The subjects of these talks are more or less immaterial, so long as they are general enough to appeal to a majority of the people. In our county, we do not have sufficiently populous communities to permit specialization in the selection of subjects. This may be otherwise elsewhere. The greatest difficulty to surmount will consist in giving adequate publicity to this movement so that all those who may be desirous of attending these lectures may be sufficiently informed thereof.

Speakers are selected on a basis of 2 criteria: (1) ability to deliver a message to the public; (2) loyalty to their medical society. For the fact is stressed that in all their contacts, this thought must ever be uppermost in their minds—that they are the mouth-pieces of the society, and, that their sense of ethics will prevent them from utilizing these contacts for the purpose of personal advertising. The committee has also chosen to select 2 speakers on each subject. The purpose of this is apparent. In the first place, it doubles the number of men interested in this propaganda, and correspondingly halves the time and effort required on the part of each speaker; and, secondly, it avoids local jealousies by preventing any speaker from delivering the address on his subject in the community in which he practices.

To find an effective *modus operandi* for elaborating these items of health propaganda should not

prove to be a difficult task. There is no opportunity to be created; it already exists. On the one hand, you have a public which is anxious to be informed regarding health matters; on the other hand, physicians who are eager to impart this information. So, there is an equation the factors of which are equivalent. All that is required is some agency to bring these factors into conjunction. This agency is a matter of various choice. Its selection will depend somewhat on local conditions. It may consist of anything except exploitation on the part of physicians themselves; for we, as physicians, can scarcely, with grace and propriety, extol our own merits.

In the Burlington County Medical Society, the agency which we have employed with very gratifying results has been the Woman's Auxiliary to the Medical Society. These women, as loyal as a group to our organization as they have been to us individually in our private practices, should receive no small credit for the encouraging prospects which we anticipate. Through the ramifications of their personal and individual interests in civic and social organizations, and frequently their identification with program committees, these women have been able to place members of our local society, as speakers on health subjects, on the programs of many lay organizations. This has paved the way for wider publicity, and now requests for similar talks are coming in independently of the efforts of the Auxiliary; so that the increase in requests is multiplying in geometric rather than arithmetic progression.

Our county society has also been fortunate in being able to bring its message of health education before Rotary Clubs, Y's, Men's Clubs, and other service organizations. The members of these service clubs have most enthusiastically entered into the spirit of the purpose, and have become valuable missionaries, each in his own little sphere of personal contacts. On several occasions, we have had requests for speakers on health talks before the session at which our purpose was outlined had concluded. A majority of the more important newspapers in the county, as well as a number of the managers of some of the larger motion picture theaters, have already volunteered space in their publications and use of their picture screens to announce any information which our committee desires to place before the public.

In short, our experience has shown that the public is not only eagerly but gratefully appreciative of the objects underlying this movement, and is coöperating with us in a degree so intense as to require very energetic action on our part to keep one step ahead. We are realizing that the opportunity is indeed ripe, and we are experiencing almost a sense of chagrin when we ponder over how narrowly we escaped missing it altogether.

In response to this appeal on the part of the public, we physicians may divide ourselves into 3 groups, and I shall ask your leave to define these groups with ungloved hands. The first group consists of those who will accept this challenge, and who will identify themselves with this uplifting movement for the welfare of humanity. These physicians are the ones who are likely to be the leaders in their profession or, at least, are the ones who will enhance the veneration, respect and confidence which the public reposes in the medical profession, and which the medical profession should justly be entitled to receive. The second group consists of the majority of physicians. They are the ones who are perfectly willing to share in the benefits which will accrue as a result of the labor and efforts on the part of others, but who

are unwilling to contribute any labor or effort of their own. They have no objection to riding in the buggy if the other fellow gets out and does the pushing. These individuals are not actively hostile but, because of their indifference and inertia, they subtract from the intensity of effort. This group may be defined as the *parasitic* group. There is a third group which consists of those who are openly hostile and antagonistic. They resent any evolutionary trend which deviates them from the ruts of established precedent. This antagonism, however, may be beneficial, if it is honest; for contrary to the preceding group, which by its inertia subtracts from the intensity of effort, this latter group, by its antagonism, multiplies the intensity of effort, in that it compels more strenuous endeavor in the perfection of detail. In other words, it may be said to purify by fire; and frequently, if any movement demonstrates its effectiveness and worth, this group becomes converted, and is likely to be the most zealous of all groups in prosecuting what it formerly persecuted. The remainder of this antagonistic group are those unfortunate misanthropes who would sooner see the human race degenerate, and the medical profession lose its own respect, as well as the respect of all humanity, because they are afraid that those physicians who do identify themselves with the work may derive some advantage which will not accrue to those who remain aloof.

Now, gentlemen, this outline, and the talk which has elucidated it, may both seem to you peurile, diminutive, and unworthy of serious consideration. However, we have not found it so. Those of you who live in large and wealthy communities, and who belong to medical societies of larger dimensions, may scoff at our comparatively inadequate endeavors. If so, you are fortunate. Our county is wide in extent and but sparsely populated. It contains no metropolitan center. It possesses but one community of wealth. We have but a few dozen members in our medical society. We have no funds to finance broadcasting, to purchase publicity space, to placard communities. All the co-operation we receive must come from the hearts and intelligence of the people. And perhaps our satisfaction is not entirely unmixed with a little pardonable pride, in that our publicity has been attained without an appeal to agencies of publicity through their purses, but perhaps through their conviction that the service which we are rendering is above price.

But, whatever our opportunities and our capacities are, there is one thing common to all of us; and that is a receptive and grateful attitude on the part of the public. This thought should stimulate us all to concerted, state-wide effort, that through our influence the time may be hastened when this old world of curs shall be a happier and healthier place in which to live.

#### DISCUSSION

*Dr. S. T. Sueddecor* (Hackensack): From the preliminary program, I had thought that Dr. Kuder's paper was the only one I might discuss, but I am glad that I may mention several of the others. I want to pay Dr. Kuder the compliment of saying that his is the best presented paper I have heard in a long time and one of the most enjoyable on a subject that is close to my heart. Burlington County is off to a great year, I am sure. Although 1931 is a depression year, it is not going to be a loss to that county. If Dr. Kuder can only carry out some of the thoughts he has expressed, I am sure that the relationship between the peo-

ple and the physicians of Burlington County will be greatly enhanced.

All of the other papers have been interesting. Dr. Waters always gives us some good plan. Last year he gave us a plan for the control of specialism, and now he has presented this plan for periodic health examinations, which I heartily approve. Dr. Perlberg has told you of some of our other opportunities and needs. They have given you the view of Hudson County. Other counties have similar problems and 1932 is going to be a year of great opportunity. Last spring the anti-diphtheria program was put on. It will be well to build up this program in every possible way and I would urge the societies throughout the state to continue that campaign during the winter and spring. We greatly need the State Society organization to help solve our problems. Dr. Reik and Dr. Morrison were the pioneers in selling health examinations throughout New Jersey, and we very much need their help this year. I have suggested a program to be carried out this winter, if the State Society approves it. I think Hudson and Bergen Counties would put on a campaign and I believe many of the other societies are ready for it.

Dr. Kuder said we have medical men with health knowledge to give, and a public ready to receive it. Those factors are agreed upon. To put this campaign over is, I believe, one of the real problems of this Conference. It is a problem of county organization. It takes organization to put over a publicity campaign. I find, in my work as secretary, that the ends to which one can direct his endeavor become so great and so detailed that one thing can be lost in trying to accomplish others. Further, in organizing committees and developing their work, we find that there is a tremendous amount of work to be performed. It is a challenge to every member of the society, to put his shoulder to the wheel this year, and I think each society needs to develop its organization carefully and more completely.

The publicity part of many subjects will take care of itself as the various phases are taken up by the special committees or groups that are prepared to work. May I just enumerate some of the ends toward which we are working. First, publicity as an entity: The various means of selling public health education, by speakers' bureaus, by radio talks, by talks before Rotary Clubs, by announcements in the newspapers, by giving the doctors certificates of membership in the county society, by having the county society seal on your stationery. That is publicity, pure and simple.

Dr. Waters has mentioned health examinations. You cannot put over your health examinations without publicity; and it is a real live topic to put over. Dr. Perlberg talked on clinics, and we surely need publicity on clinics. About 2 weeks ago I received a printed pamphlet from Mayor Hague, announcing that the Margaret Hague Hospital for maternity cases had opened in Jersey City. There was only one thing missing in that pamphlet, which was sent to the public at large as well as to the doctors, and that was recognition of the medical profession in regard to the part it would play. It referred to the politicians, and what the public would be getting free of charge. The subject of clinics is a problem for us to take up this year and it will get closer and closer to us if the present tendencies and practices are continued. There is no one solution to the clinic problem but I think there are many questions involved there. To digress a bit on Dr. Perlberg's topic of clinics, there is no one cure, because conditions in the different counties vary so greatly.



The urban community cannot approach the subject in the same way as the rural communities. Dr. Perlberg suggested that every doctor have a clinic in his own office. I feel that is a splendid idea that can, perhaps, be generally adopted. It is suggested that clinics should be held for diagnostic purposes only; that patients should be admitted to clinics only on reference by their physicians. Some method should be devised for referring patients back again to those family physicians. Doctors who work in clinics should be paid for their services as, usually, every one else connected therewith is paid. We have a challenge to organized medicine and we must meet it through organization.

The cancer problem is something the public is tremendously interested in and we are being urged by the American College of Surgeons to organize and establish cancer clinics. That is, the public wants better cancer diagnosis and treatment. It is a challenge to us to supply them. There is plenty of publicity in that subject. If you mention that your county society will have a meeting to discuss cancer you will get all the publicity you can supply. The Public Health Nursing Organizations will give you lots of publicity, and they are a challenge to you, needing your direction. In our county, there is a Christmas Seal organization which is floundering about without direction, lacking help from the medical men. We are trying, through a committee on Public Health Nursing, to make contacts with all nurses in our county and to let them know that we are interested in their work and will assist them in spending their funds.

Post-graduate teaching should receive a lot of our time this year. Doctors are spending time in learning to be better doctors in order to give better service. The school physicians in every county offer us a problem, to which Dr. Ireland has offered us an approach. Better school health examinations, and the campaigns that are put on in the schools for clinics, for pre-school examinations, etc., all come under the Public Relations Committee's work. It is easy to get publicity on school work, but some supervision is necessary so that the doctors will not be imposed upon. There are many fields of effort in which the county organization should take part. Oftentimes it is a tremendous burden upon the officers of the county societies, yet they must meet these problems as best they can.

I have this suggestion to offer for the larger societies, beginning with those that approach 200 members, and that is, the need for an *executive secretary*. In other words, I see the need of doing myself out of a job and putting in a man who can devote the greater part of his time to the county organization, a man who can establish an office for the county medical society where people can get information regarding specialists; where strangers coming to town can find out who is a good doctor in a given neighborhood, should they need to call one in case of sickness. We need an organization that will send doctors out to take care of the poor so that they will not need to go to clinics. We need a county executive officer who can go out and make contacts with all these public health organizations, who can go into the schools and assist in their work, who can help organize the hospital clinics, meet with the doctors, carry their messages, develop their campaigns, and in every respect work for better and more effective medical service.

I believe that this meeting of secretaries and reporters will be of great benefit this year, as it

has been every year that we have had a conference. Many excellent ideas are put forth. We have had them this year, as in previous years. It is for us now to carry these ideas back to our respective county societies and try to put them into effective operation.

*Dr. John F. Hagerty:* In regard to the specialties and specialists, there is no doubt that there is need for settlement of this troublesome question. It is in an unsatisfactory state at the present time and I have always felt that the American College of Surgeons should have decided this question as it is the legitimate body to decide all such questions. I am inclined to find fault with the College for having allowed such unsatisfactory conditions to prevail and not taking steps to correct them. More than a month ago, I wrote to the American College of Surgeons asking why it had not attempted to solve this problem, or what it could do to correct the abuses that exist, and I have not yet received a reply from Dr. Martin.

I had given some little thought to the question and am thoroughly in accord with Dr. Waters' suggestion of last June. I have some thought of bringing it to the attention of the Welfare Committee of our Society. I think the American College of Surgeons should have set up some executive machinery as they did to determine the fitness of a man to become a member of the College. The College should have some type of machinery to pass upon the fitness of the men, in the various states, known to be specialists and qualified to practice a specialty. I question whether it cannot be done by our State Society, setting up a Credentials Committee. They would be familiar with the men practicing in any county and, without its having legal force, could determine that certain men are qualified to hold themselves out as specialists. I think that is a perfectly legitimate thing to do, and not an unfair thing at all. It would establish the fact that certain men are qualified to practice a specialty, in the opinion of the local society. I think this would be very fair, and a step forward toward settling this very unsatisfactory state of affairs. The time will come, I think, when certain colleges will conduct courses for post-graduate work and for men who desire to become known as specialists. Perhaps some states will enlarge their Medical Practice Acts so as to make it necessary for one who desires to practice a specialty to qualify before the State Boards of Medical Examiners. Until that time, I think the State Medical Society has the means of settling this question very satisfactorily in a rather simple way. I would be glad to hear an expression of opinion as to this plan.

*Dr. Pinneo:* In view of Dr. Hagerty's remarks, some opinion should be expressed on this subject of specialists. I think we all feel that this matter is much in the air at present. There has already been introduced in the legislature a drastic bill and that kind of a bill is bound to come up again. We all know that the qualifications of men who pose as specialists need study and if the law and the politicians take up this subject, when the medical profession does not interest itself, it will be like a lot of other things that the medical profession should handle and does not and will get out of our hands. If this does happen it will be our own fault. I think we all feel that no one has yet framed a law that would cover the ground. Why should not the State Society at least study it and try to work out some plan so that if politicians should introduce a law we will know how

to amend it or what sort of law to introduce ourselves. I believe a law will not control the qualifications of a man but our State Society could act as the old Guilds did in Colonial days. The shoemakers had one of the earliest guilds to maintain the qualities of shoes that should be made. It is, therefore, this guild spirit which may help solve this problem which is purely medical.

#### ELECTION OF OFFICERS

The Nominating Committee consisting of Drs. R. I. Downs and R. S. Gamon, reported the following nominations of officers for the ensuing year: President, D. F. Featherston, Asbury Park; Vice-President, Harry J. Perlberg, Jersey City; Secretary, A. Dunbar Hutchinson, Trenton.

The nominations were by vote declared closed and the above officers were elected.

Luncheon was served at 1 p. m. at the Carteret Club, and immediately afterward discussion was continued.

#### AFTERNOON SESSION

*Dr. Tracy:* We will now have Mr. Eastwood give us a few "Don'ts for Docs on My Docket".

Mr. Eastwood entertained us with some interesting stories, illustrating amusing events when physicians are upon the witness stand, and his advice consisted mainly in warning against use of technical terms, against carelessness of expression, and in directing attention to the excellent work being done in New Jersey by treating young offenders as psychopathic problems rather than punishable criminals; especially referring to the institution at Jamestown. Then he paid a very high tribute of respect to physicians for holding fast to their centuries old but still reliable and noble code of ethical conduct.

"I think it was Dr. Hagerty who said to me today that he was glad he had started the practice of medicine a good many years ago instead of having to start today. I presume he meant nothing else than the fact that we have such a complex situation with which to deal today and that it takes much courage for a man of ideals to pass through life safely and keep his honor and his integrity. It is well to give yourselves for your country, but it is more important to live for your country." As the poet, Ernest Howard Crosby, has well said:

So he died for his faith. That's fine—  
More than most of us do.  
But stay, can you add to that line  
That he lived for it too?

In death he bore witness, at last,  
As a martyr to truth.  
Did his life do the same in the past  
From the days of his youth?

It is easy to die. Men have died  
For a wish or a whim—  
For bravado or passion or pride.  
Was it harder for him?

But to live; every day of his life  
All the truth that he dreamt,  
While his friends met his conduct with doubt,  
And the world with contempt.

Was it thus that he plodded ahead,  
Never turning aside?  
Then we'll talk of the life that he lived—  
Never mind how he died.

We are making our contribution to the days in which we are living. We are artists; we are painting a picture. Will it be a beautiful one, or will it be marred and scarred, as we pass from this mortal coil? That is the task for each of you medical men, and that is the task for all of us, and then we can say with Rudyard Kipling:

When earth's last picture is painted and the tubes  
are twisted and dried,  
When the oldest colors have faded, and the youngest critic has died,  
We shall rest, as, faith, we shall need it—lie down  
for an aeon or two,  
Till the Master of All the Workers shall put us  
to work anew.

And those that were good shall be happy; they  
shall sit in a golden chair;  
They shall splash at a ten-league canvas with  
brushes of comet's hair;  
They shall find real scenes to draw from—Magdalene, Peter, and Paul;  
They shall work for an age at a sitting and never  
be tired at all.

And only the Master shall praise us; and only the  
Master shall blame;  
And no one shall work for money, and no one shall  
work for fame,  
But each for the joy of working, and each in his  
separate star  
Shall draw the Thing as he sees it for the Good  
of Things as they are.

#### GENERAL MATTERS OF IMPORT TO COUNTY SOCIETY WORK

*Dr. Tracy:* The formal program having been completed, is there any further business? Dr. Morrison, will you and Dr. Reik speak to us concerning any matters you may wish to present?

*Dr. Morrison:* I was instructed, at the Convention in June, to prepare a universal membership application blank, and I have received forms from several counties that appear to meet the necessary requirements. I wish you would study this, and if there is anything to add to it let me know. It will be presented in my report to the next Annual Meeting.

I wish also to remind you that the Advisory Committee, appointed by the Commissioner of Labor 1½ years ago, to make a study of the Compensation Act, finished its labor but was requested to continue this winter and practically to rewrite the Compensation Act. You know that it is a hodge-podge at present, for 17 amendments have been made since the Act was first passed, and we are having a meeting next week to codify the Act. I intend to request the Welfare Committee to consider any amendments you may wish incorporated in the Act, because if it is thoroughly rewritten now and the Legislature spends 2 or 3 weeks on it, it will probably be 5 or 6 years before it will want to tamper with it again. If you want any amendment, now is the time to put it in.

I wish to call your attention also to the fact that we are receiving some benefits this year from the Post-Graduate Course at Rutgers, which institution has received from the state a certain amount of money to be expended for medical education, and that allows us to offer a course of post-graduate medical instruction this year at \$15. The list of subjects to be offered will be very much enlarged, and we hope for a registration of 1000 instead of the usual 350 or thereabouts.



*Dr. Tracy:* I will entertain a motion that each society be asked to take action upon this blank form of application for admission to county medical societies.

This motion was made by Dr. Hutchinson, and duly carried.

*Dr. Tracy:* I understand that we have no recommendations in regard to the compensation law. Is there any further discussion on any of the papers of this morning?

*Dr. Waters:* I would like to mention one thing, which does not bear directly on any of the papers but is a matter which is, or ought to be, of interest to many society members, and that is the *availability of hospital facilities to doctors*. There are many members of our county societies who are not on local hospital staffs. I should say, without definite knowledge, that most of the hospitals of the state operate on a so-called *staff plan*, which means that a great many men whose patients need hospitalization lose those patients temporarily, and sometimes permanently. I realize that this is a matter conducive to considerable discussion but I have felt that the county societies should take some action, each in its own community, regarding the use of hospital facilities by county society members. I think it is unfair for any small group of doctors to handle all of the hospital work in a community, whether or not the work be charity or private. Of course, I realize—and no one realizes more than I, perhaps—the necessity for careful supervision of hospital work in order to have it competent, but I do think that a great many men in our societies are unfairly deprived of hospital privileges. To bring it down to a more practical basis, I think that there should be for all of our hospitals an open, courtesy staff, under which plan any competent physician could bring his own private patients into the hospital and keep them under his own personal care and supervision; with the proviso that unusual complications or operative procedures involving such patients should be subject to control and supervision of the attending staff. That would mean, that if a general practitioner, or a man who only occasionally does surgery, brings a patient into the hospital—say a hernia case—which he feels competent to take care of, instead of losing control of the patient he would be privileged to take care of him if in the opinion of the staff he is able to do so; and, if not fully competent, he should be able at least to take care of the patient under their supervision. I do not think he should be required to surrender entirely control of his patient. That plan, as regards obstetrics, is now being put into action at the new Hudson County Maternity Hospital where there is a fixed attending staff and also a courtesy staff. Any man in good standing in the county medical society will be permitted to bring his obstetric patients into the hospital and care for them himself. If obstetric complications arise, or if an operative delivery becomes necessary, he must avail himself of consultation through the attending staff. In this way he is protected in his relationship to his patient, and at the same time his patient is protected so far as her rights are concerned as to what she may expect to receive in the line of adequate hospital care.

*Dr. Morrison:* I am very glad indeed to hear Dr. Waters present this subject. After I had studied medicine, taken my post-graduate intern-

ship, and located in Newark with 5 years of surgery preparation behind me, I could not take a surgical case into any hospital. It was years before I had operating facilities offered me. We organized the Presbyterian Hospital with facilities for about 20 patients. The present Presbyterian Hospital has in 17 years grown out of that small institution, and become one of the finest in the state. We have made it an *open hospital* and 437 physicians and surgeons now bring their patients to that hospital. We have the regular attending staff, also a courtesy staff, and a courtesy committee which has studied the qualifications of every physician in the county, and men who are attending or associate surgeons at other hospitals are given full courtesy privileges; they can bring in a patient and operate without consulting any member of the staff. We have another group, members of which can operate under supervision of any of the men on the regular or full courtesy staffs; that is, they are not required to have an attending surgeon or one of our associates, but may have any man who is recognized by the committee as being capable of handling surgical cases. In this way we are extending to 437 physicians facilities to take care of their own patients and we are giving the public, which has subscribed to that hospital, opportunity to retain the services of the chosen family physician. The tendency for open hospitals is growing very rapidly, and anything that we can do to push it along, under properly controlled methods, should be done.

*Dr. Corson:* It seems to me that if the State or County Medical Society would request the hospital staff to have open meetings, where cases will be discussed, the results would be of great value to other members of the profession. In our hospital, we have, of course, regular staff meetings but if the county society would request the hospital staffs to have open meetings where any members who desired to attend could hear the discussion of charity cases, it would be of great educational value. It would also put the county society on record as recognizing the educational value of the hospital.

*Dr. Hutchinson:* In Trenton, and I believe Dr. Scammell will bear me out, our hospitals have for years been extending courtesy to physicians outside the staffs, the only stipulation being that they shall be members of Mercer County Society. This is similar to the plan that Dr. Morrison has referred to.

*Dr. Kuder:* I desire at this moment to appear as a suppliant. Due to the enormously increased interest in public health on the part of the public, and the wide use of the radio as a means of disseminating news to all parts of the country, there has sprung up a new form of racketeering regarding all manner of cures for ailments by quacks who are interested in the commercial side of medicine only. There is much reliable information being broadcast but the public cannot be expected to differentiate between what is true and proved as the result of medical investigation and research, on the one hand, and what is false or broadcast for a purely mercenary reason, on the other. Our committee is compiling information on health matters being broadcast. If you belong to or know of medical societies which are broadcasting medical information, it will be appreciated if you leave in the hands of our secretary, Dr. Hutchinson, or our President, Dr. Tracy, statement of the days, hours and stations through which they come. We

expect to utilize this information in our county society pamphlets, and we may distribute to our patients cards giving this information.

*Dr. Morrison:* I would like to remind you that the A. M. A. has published a list of 5 minute and 15 minute talks for radio broadcasting of public health matters; there are about 75 of the 5 minute talks, and about 40 of the 15 minute talks, which have been printed for distribution, and I am writing for copies. Later on, any of you may have mimeographed copies from our office, if you so desire.

*Chairman:* Now, gentlemen, I shall call upon our Editor and Executive Secretary, who always has something important to tell us. Dr. Reik, we will be glad to have you address the Conference.

*Dr. Reik:* I want first, Dr. Tracy, to congratulate you upon this very successful meeting. It is not the best attended meeting of this group, and I am very sorry that so many of the county organizations are not at all represented today; that is a misfortune for us, but it is a much greater and more serious loss for those county societies.

Before leaving home, I looked over the record of what this organization of Secretaries and Reporters has done. We have completed 5 years of work, growing out of the first opportunity that was given for the Secretaries and Reporters to get together, and compare notes and bring about some sort of harmony of action in the 21 component branches of the State Society; at a luncheon tendered by Dr. Donohoe in the second year of his presidency. The accomplishments of this organization have been much greater than any one would have expected. Inasmuch as there are several representatives here today, or there should have been, who have only recently been elected to the office of Secretary or Reporter in their respective county societies, I think it worth-while to call attention to the published reports of the several meetings that this group has held. A number of very excellent things have resulted from these annual conferences. I am sure, for instance, that routine meetings of the county societies, throughout the state, have improved markedly during the past 5 years. The first noteworthy fact was, I think, that whereas there were 7 or 8 counties in which only 2 meetings a year were being held, and several others in which 4 meetings per annum was the rule, when we set up this organization, the present schedule shows that: 10 of our county societies meet monthly (except in June, July and August); 3 hold 6 meetings a year; 7 hold quarterly meetings; and only 1 remains upon the 2 meetings per annum basis—and that county, Cape May, would not be justified in changing.

The next noteworthy change concerns the method employed in calling meetings. I think it was Bergen County that started the "bulletin" form of calling meetings of the county society; at any rate, Dr. Snedecor showed one of his card bulletins here 3 years ago, and other Secretaries began adopting them. It has perhaps been one of the most effective methods of increasing attendance at and interest in the county society meetings. Also, several secretaries have been using the bulletins for conveying messages. Dr. Hutchinson inserted a notice in one of his meeting announcement cards, calling attention to something in the current Journal, and almost immediately several other secretaries adopted his plan. This practice has been continued more or less regularly, and it has been very beneficial.

A number of things that have been considered by the State Society at its Annual Meetings had their origin in these secretarial conferences. I remember that at the first gathering the discussion was on the possible advantages to be derived from occasional meetings of the secretaries from all over the state. At the next meeting emphasis was laid upon the statement that *in any medical society the secretary is the all important factor*. It was said that "a medical society is just as good or as bad as its secretary"; a statement of fact now generally recognized throughout the nation. We have helped to improve conditions in some counties by improving the secretaries and by getting into those offices men who are interested and anxious to develop the work. Such a program as we have had today, I think could not have been constructed among the secretaries 5 years ago; it has resulted from a gradual evolutionary process.

Coming now to the discussion of today's papers, I shall not enter into that, although I would like very much to do so because a number of interesting facts have been brought out here. The offices of the Secretary and Executive Secretary are always open to the secretaries of the county societies, and I want to offer a bit of help in 2 directions.

I have already stated that we are working in connection with Dr. Waters for advancement of another campaign on periodic health examinations. Dr. Kuder, in his second talk, spoke of broadcasting facilities for his county society. For 6 years we have had the privilege of broadcasting weekly talks from station WPG, Atlantic City, and we have carried on such broadcasting, by either the State Society or the Atlantic County Society, from November to May each year. This opportunity has been offered us again this year and we are availing ourselves of that privilege, but I think the Atlantic County Society would be very glad to share its time with Burlington County; so, if you, Dr. Kuder, want an opportunity to use the microphone, we will gladly offer it to you. The counties that have used broadcasting privileges during the past 2 years, besides Atlantic, are Bergen and Monmouth; Essex and Hudson County Societies have both acted favorably upon our request to broadcast, but I do not know of either having put on any specific program as yet; I think the matter is still open and being sporadically discussed. The Executive Secretary will be pleased to assist any county society in the preparation of radio talks.

The notes that I have made concerning discussions at these conferences since 1926 will be, I hope, interesting, and I am quite sure you will be surprised at the good work that has already developed from these meetings.

So, permit me to review, very briefly, the previous conferences and to give volume and page references to our Journal's publication of the minutes of each such meeting, which will enable those of you who have been in service throughout that period to refresh your memories, and afford those who have only recently been chosen for service an opportunity to find recorded and become familiar with our transactions.

In 1926, responding to a suggestion made by the Executive Secretary, the first conference was provided for by Dr. Lucius F. Donohoe, then President, who invited all the County Society Secretaries and Reporters to a luncheon, at his personal expense; and Drs. Morrison and Reik addressed the group, pointing out the importance of these officers to their respective organizations and the



necessity for their taking the work seriously. (See Journal of 1926, page 366.) Attention was directed, specifically: to the county society as the basic factor in all organization work; to the desirability of inducing hospitals and other medical institutions to report their scientific work regularly to the Journal, in order that the Editor might be enabled to publish all of the scientific and professional accomplishments of New Jersey physicians; to the importance of aiding every public welfare movement and acting promptly upon requests from officers of the State Society. The routine work of secretaries and reporters was clearly defined at that session, also, so that newly elected county society officers thereafter might be supplied with a printed or typed copy and take office with an understanding of customs and quickly fall into harmonious relations with organization colleagues.

In 1927 (see Journal, August Supplement, Official Transactions, pages 56-60), President Green repeated Dr. Donohoe's generous luncheon party, and Drs. Downs, Hutchinson, Lathrope and Shirefs read papers dealing with county society problems, and Dr. Snedecor submitted some plans (see page 672) for improving county society programs. At that conference the organization of secretaries and reporters began to function "on its own", as one might say; assuming responsibility and beginning to direct its own affairs.

In 1928 (August Supplement p. 50-54), President Conaway being our generous host, Dr. Frank C. Hammond, Editor of the Pennsylvania State Medical Society Journal, gave us an excellent address upon "The Conduct of a County Medical Society", showing the opportunities open to secretaries for starting new works.

It was in 1929 that the "Conference" really became established as an independent organization—subject only to the parent body, the State Society; the Board of Trustees having officially recognized the benefits growing out of the work and, in consequence, having appropriated \$150 or "so much thereof as might be required" to cover the cost of the Annual Conference; thus relieving future State Society presidents of what might easily become a burdensome tax. Report of the proceedings for that year can be found in the Journal (March, pp. 248-264; and December, pp. 876-890). During the year 1929 the Conference held 2 meetings, the reason for which was—the necessity for cutting loose from the Annual Meeting of the State Society, when so many other things of interest to Conference members were happening, and the holding of our meetings at a time and place for undisturbed consideration of important business. At those sessions, papers were read: by the Executive Secretary, on "Development and Correlation of County Society Work"; by Dr. Ross, President of the New York State Medical Society, on "Professional Problems and Medical Progress", which was followed by a lengthy discussion; and, by Dr. Buzby on "The Relationship of the Secretary to His Own Society".

The year 1930 (see Journal, pp. 1000-1020) was distinguished by a group of interesting papers, as follows: by Dr. Walter F. Donaldson, Secretary of the Pennsylvania State Medical Society, on "Councillor District Meetings", which resulted in our securing adoption of the plan, through recommendation to the Trustees and House of Delegates of the New Jersey State Society; by Secretary Morrison, on "The Threat of State Medicine"—resulting in the State Society appointing, in response to recommendation from this Conference, by motion of Dr. Fuhrmann, a special committee to in-

vestigate and report upon this subject; by the Executive Secretary, upon "Observations on State Medicine in Other Countries"; and by Dr. Tracy, on "Some Problems of the County Society".

This summary, Mr. Chairman, of the works performed and results so far attained by this Annual Conference of County Society Secretaries and Reporters, in the short period of 5 years since its birth, constitutes a record of which we may well feel proud. Your program today has advanced the good work markedly, and we trust that your successor in office will endeavor to surpass even your record.

In conclusion, I desire to mention only one additional fine State Society activity which has grown out of these conferences; that is, the establishment of Councillor District Meetings. Last year, while Dr. George Lathrope was Chairman of the Conference, he brought to us Dr. Donaldson, Secretary of the Pennsylvania State Medical Society, and as a direct result of the latter's address, we inaugurated the district meetings, and with such beneficial effect that the State Society has authorized continuance of the plan.

*Dr. Tracy:* Discussion is in order as to where we shall meet next year and when.

*Dr. Reik:* I think that matter was thoroughly discussed at one of the previous meetings and it was decided that Trenton is the most central point for holding the meetings, and that the early part of November is the most favorable time.

*Dr. Tracy:* The thought occurred to me this year that the middle of October would be a better time because some of us get very busy in November and that may be an important factor in regard to attendance.

*Dr. Hutchinson:* There are, I think, about 11 counties that hold annual meetings and election of officers during the month of October, and in sending out a call for this conference in the early part of November it is sometimes difficult to decide to whom to send the notice; whether the listed secretary is still in service or has been superseded. If it is at all possible to arrange for a meeting time so that the notices may reach the proper officers, I think that should be considered. Unless the secretary of this organization is promptly informed about newly elected officers, it is difficult to reach the right men.

*Dr. Morrison:* You can always get that information from the Executive Secretary's office.

*Dr. Reik:* In general, yes, but sometimes even I do not have that information as promptly as could be wished; occasionally the reporters delay submission of reports and I find it difficult to secure the information.

*Dr. Pinneo:* When we discussed this matter before, the early part of November was found quite universally favorable. The 2 weeks of post-graduate work in New York comes in October, and also at that time the College of Surgeons meets. I move that the meeting time be this corresponding Wednesday of next year.

This motion was seconded and carried.

*Dr. Hutchinson:* I want to say one word in commendation of this program, giving due credit

to our President, Dr. Tracy, for its success. While my name appears at the bottom of the program, I want it distinctly understood that the Secretary had nothing whatever to do with arranging this program, and all the credit belongs to Dr. Tracy.

*Dr. Pinneo:* Two years ago we acted on a motion, to have the Reporters made members of the State Society's House of Delegates, and I would like to suggest, in view of the possibility that the Revision Committee of the State Society is contemplating some changes in the Constitution and By-Laws, that this motion would be in order; that if and when the Revision Committee contemplates any change of the Constitution and By-Laws, it should give heed to the recommendation made—that reporters be made members of the House of Delegates. In explanation thereof, I submit the following:

That the House of Delegates of the State Society be requested to create, in the new Constitution and By-Laws, status for the Reporters by providing that each county society be entitled to elect its Reporter a member of the House of Delegates for the term of 1 year, while Reporter of his county society.

That the Secretary of this Conference is hereby requested to communicate this action to the officers of all the county societies.

Some reasons for this:

(1) The old Constitution and By-Laws made the Reporter an Annual Delegate provided his report was received by the Committee on Scientific Work 30 days before the Annual Convention. Under the new order the only provision for reporters is in Chapter X, Section 7, of the By-Laws, which says:

"Each component society shall elect a Reporter, who shall furnish the Editor with brief reports of its meetings and of items of interest concerning the society and its members, extracts of papers and interesting case reports, notice of the prevalence of contagious and other diseases of the county, and the election, removal or death of members."

This gives the reporter no status in the State Society, whereas the office was created by the State Society and had important relations to it, and not only to the county society.

(2) The effort in all the county societies is to get efficient work by the reporter and it is a difficult and thank-worthy job. The reporters are entitled to, and should be encouraged by, appreciation of their work; this would give dignity, honor and opportunity to them.

(3) The reporters, being county officers, have knowledge of county matters which is of value to the State Society and should be made useful therein. This would add efficiency in the State Society.

(4) This plan makes no change in other delegates, nor their terms of office, nor does it encumber the House of Delegates: making only an addition of 21 members. This would not involve other changes.

(5) The legislative principle of numerical representation of counties is already approved in the constitution's providing that "each component society shall be entitled to at least 3 delegates".

(6) In working the revision of the Constitution and By-Laws, one plan, to provide for a larger representation of the smaller counties, was to cut down the ratio from the larger counties, but that was abandoned for a ratio of 1 delegate to 15 members throughout. It was suggested that if some

one could design a plan for combination, in one Assembly, of a Senate and a House of Representatives, it would satisfy equally small and large counties. The plan now suggested accomplishes just that. Each county, large or small, would have an additional member of the House of Delegates, its reporter, elected for 1 year.

I would like also to offer another motion. Chapter 9 of the By-Laws reads that—a new member admitted in October shall pay for only one-half of the year. This is often criticized, and a number of our representative men have suggested that it read one-fourth instead of one-half. I move that this conference recommend that Chapter 9 of the By-Laws shall read that "any member admitted to the State Society in October shall pay one-fourth instead of one-half of the annual assessment for that year".

This motion was seconded and duly carried.

Adjournment at 3:30 p. m.

## Public Relations

### NOISY AMBULANCES

(An excellent bit of advice from a New Jersey physician, to our hospitals, through the *Literary Digest* of Nov. 14, 1931, from the N. Y. Times of date not given.)

If any vehicle should proceed smoothly and with a minimum of noise it should surely be an ambulance. Yet, we are assured by Dr. Charles H. Young, Director of the Mountainside Hospital, of Montclair, New Jersey, that many, perhaps most, ambulances are speeding, jumping, bell-clanging nuisances, and the patient inside is scarcely benefited. His own ambulances have no bells, Dr. Young assures us; the driver keeps within 35 miles an hour, and proceeds quietly. Dr. Young thus writes to the *New York Times*:

"An experience of 25 years behind a hospital superintendent's desk emboldens me to comment upon the recent campaign of the public press against excessive speed and raucous noise. Speed and clamor in ambulance transportation of invalids is wholly and criminally evil, unless we value the thrill it gives to morons on the public street, the feeling of bombastic importance it affords the ambulance surgeon, or, the sense of heroic skill the driver hopes he imparts to observers. It agitates the patient, it grates on his nerves, it puts him in a state of anxiety and dread, it does nothing to mitigate his suffering, hasten his recovery, or increase his chances for life.

The ambulance surgeon has all necessary apparatus and instruments for first aid, can do everything needful for the patient before placing him in the car, and while en route. If he possesses common sense, medical judgment, decent human instincts, he will transport the patient comfortably, quietly, safely, at moderate speed. He will ignore the public clamor for the following of blind tradition—for tradition alone is responsible for the spectacular and cacophonous rush of the ambulance. That is, he will do these things if he is allowed; but the surgeon often has no control, the driver no choice. The control rests with the hospital board of trustees or the private owner, and often their better sense is overcome by thought of the advertising value of a rushing car with a name conspicuously displayed. Often,



also, their minds do not function, but accept the old tradition that the welfare of the patient demands all possible speed in getting him to the magic atmosphere of the hospital. Instead of harining a sick person, often a long ambulance ride in the open air revives and benefits. Temperatures are often lower when arriving at the hospital than when taken from the home.

Hospital records reveal a sad list of death to patients, doctors, drivers, pedestrians, and motorists by accidents from speeding ambulances, but *there is no record of life being saved by speed and noise*. The ambulance of the hospital where I am now director has no bell; the driver knows his job is finished if he goes more than 35 miles an hour, or if he honks his horn more than is absolutely necessary. He is told that the ambulance has no legal rights over any other vehicle, and that his employer, the hospital, will in no way assist him if he violates police rules and traffic regulations. He, solely, is responsible for the carrying out of these rules and will accept no orders or suggestions to the contrary from any one on the ambulance, including the surgeon.

If hospital authorities and private owners fail to control this inexcusable and dangerous practice, the police can and should."

### THE HOE. A CURE FOR CRIME

(Reprinted from *The Literary Digest* of Oct. 3, 1931.)

Fire! A long blast of the siren called the men from their work in the fields, 20 gangs were hastily summoned from the ranks of 260 and sent out to beat back the rapidly advancing flames. Exultantly they raced out. All during the afternoon and long after dark they fought the fire burning through wood and brush, and it was near midnight when the last spark was stamped out. Lining up in squads, the men marched back, but when the roll was called, 12 were missing. However, Superintendent Karlberg didn't send out a posse with rifles and bloodhounds; instead, he dispatched several motor-trucks, and ordered them to turn their search-lights toward the forest. The drivers sounded their horns and, presently, faint halloos were heard in the distance. Soon the 12 men came straggling out of the woods, where they had been lost in the dark, and all were returned to their quarters.

The felons at the New Jersey State Farm, near Leesburg, do not want to escape. No armed guards watch them. The State of New Jersey, William Inglis tells us in *The Review of Reviews*, has established a system of human economy by which it attempts to reclaim all the convicts who can be brought back to normal, and make them self-supporting at the same time. But there is no competition with free labor. The products of the farm are sold to other state institutions.

The State Farm has been substituted for blocks of cells, and we are told that the plan is being tried by other states—Virginia, Ohio, Indiana, Illinois, Wisconsin, and Minnesota, generally with good results. But, New Jersey is believed to have made the most success, says the writer. "The foundation of the Jersey method is the scientific system of selection of convicts who can be trusted not to run away from the farm—40% of the State's prison population. There is no coddling; prisoners are there to work for all they are worth, the state simply gives them a fair chance to make good.

These men at Leesburg are up before 6 a. m.,

eat a good breakfast, and begin work at 7. With an hour at midday for dinner, they work till 5, then march to quarters, have half an hour to bathe and get ready for supper. They return to their barracks, or read, talk, and play games in the big recreation-room, and go to bed at 9 p. m.

The kitchen is large, well lighted and ventilated. The food is not only wholesome but appetizing and well cooked. Each man stops long enough at the service window to help himself to his portion—Lord! how these farmers do eat!—then marches to his place at table and enjoys his meal in comfort. They may talk if they wish. They have about the same kind of plain, nourishing food that a college crew or football team has at training table—with one exception; there is no butter. It would cost the State \$15 a man per year to provide butter. Yet, if the felon wants it he can buy butter out of the 25 cents a day he receives for his labor. He can also buy tobacco, sugar, candy, and toilet articles. The men all gain weight, health, and strength on the farm. In the busiest seasons they can earn 45 cents a day at road building."

Another State Farm is at Bordentown, and of his visit there Mr. Inglis writes: "Your establishment seems to me more like Muldoon's or Bill Brown's health-farm than a prison, I remarked to Lieutenant Waldo A. Page, the superintendent. Tired business men pay Bill \$150 a week apiece for the care your lads get free from the State.

But the business men can walk out whenever they like, Mr. Page replied. Our men are bound to stay here until the State lets them go—a big difference.

Enlightened selfishness, if you care to call it that, he answered. They know that running away would put them back for a long term in prison cells. Compared with that, the farm is like a convalescents' home. And that's what it is for most of them—a home that builds up their health, physical and mental, gives them a chance to become real men."

Only men who can be trusted to stay on the State farms are selected, we read:

"Every convict sent to the State's prison is carefully examined, not only as to his physical and mental condition but as to his entire history. He is treated, not as a specimen of the degraded criminal class, but as a sick man, one whose character has been warped by some twist or deficiency into abnormality. That sick man is weighed, measured, analyzed with care. In a month a clear clinical picture of him has been made—or, rather, a set of pictures, each in the mind of an expert in dealing with delinquents.

One of the most significant discoveries in a searching examination of the latest 2000 felons sent to the New Jersey State's prison is that only 44% of them are of normal mentality, while 56% show some type of psychosis.

At the end of a month, the observers compare notes on the man and judge whether it is safe to trust him on the farm. These judges are: the resident physician, the psychologist, the psychiatrist, the industrial director, the head teacher in the prison school, and the deputy warden, who is the chief disciplinary officer. If these 6 agree that the convict will stick to the farm, they recommend him for that privilege. If even 1 disagrees, he studies the man until he is convinced, or until he can prove that the man is unsafe outside of the Big House.

Men indicted for murder, convicted of manslaughter, and sentenced to long terms, have been found capable of being trusted outside of prison walls. So have some highwaymen and burglars,

although 4/5 of the crimes of violence are committed by men of low intelligence."

And what is the lesson? Does this show of mercy help the criminal? And how does it compare in cost with keeping the criminals behind stone walls and iron bars?

This is the testimony given to Mr. Inglis by Col. Joseph D. Sears, committee chairman of the New Jersey State's prisons:

"Our experience convinces us that about 40% of all the convicts in this country can be safely kept on farms under minimum restraint. There, they would have a far greater chance to become normal, and the nation would save many millions of dollars in keeping them. It costs from \$5000 to \$7000 per man to house convicts in the crowded steel cell-blocks, with stone walls, armed guards, etc. On the farms, the housing costs only \$1000 to \$1200 per man. Our farm prisoners earn 5/7 of the cost of keeping them, reckoned as from \$1.10 to \$1.15 per day per man. Under maximum restraint they earn far less. Our methods and results have been checked and approved by such men as Prof. E. R. Johnstone and Drs. Edward Doll, Paul B. Means, James Quinter Holsoapple, F. Lowell Bixby, Martin H. Reddan and J. W. Crane.

We are convinced that the basis of prison administration should be to make the punishment fit the man, not his crime. We believe that we have found an economic way of helping twisted men to go straight."

#### LEGAL VOLUNTARY EUTHANASIA

(From the London Weekly Times, Oct. 22, 1931.)

Dr. C. Killick Millard, Medical Officer of Health, for Leicester, in his Presidential Address to the Society of Medical Officers of Health on Friday, spoke strongly in favor of the legalization of voluntary euthanasia in certain circumstances and subject to proper restrictions and safeguards.

He pointed out that, in spite of all advances which preventive and curative medicine has made, vast numbers of human beings were doomed to end their earthly existence by a lingering, painful, and often agonizing form of death. After making it clear that he did not propose that mentally defectives and old people who had become a burden on their relatives should be quietly consigned to the lethal chamber or that suicide should be encouraged, he said his proposition was that individuals who had attained to years of discretion, who were suffering from an incurable and fatal disease, should be allowed by law, if they so desired and complied with certain requisite conditions, to substitute for the slow and painful death a quick and painless one.

In order to bring the proposed reform more within the range of practical politics, he had drafted a Bill to make voluntary euthanasia legal. This provided that an application must be made by the person desiring to euthanize (i.e., to receive euthanasia). It must be duly attested by a magistrate or commissioner of oaths. The application must be accompanied by 2 medical certificates, and sent to an official appointed for the purpose and called the "euthanasia referee". If he was satisfied, the application and certificates would then come before a court of summary jurisdiction, which would, if satisfied, issue the necessary permits—1 to the applicant to receive euthanasia, and 1 to a medical practitioner, who would usually be named in the application, to administer the euthanasia. A euthanasia permit would remain valid for a certain specified time, say, 3 months, after which it would lapse, but could be renewed.

#### "IN A HELUVA FIX"

(Editorial in the Jour. Indiana Med. Assoc., May, 1931.)

In the April number of The Journal we discussed the action of one of our Indiana insurance companies in refusing to recognize members of pseudo-medical cults in giving statements concerning accidents and illness. The company in question consistently has refused to recognize chiropractors, naturopaths and kindred healers, whether licensed or not. This refusal led to a controversy with the Insurance Commissioner of the State, in connection with the claim of a policyholder who suffered a badly sprained ankle and went to a chiropodist for treatment. Since the publication of the article we have received a letter from a sick and accident insurance company which not only is interesting and amusing but proves conclusively why members of the pseudo-medical cults should not be considered as competent to give a statement as to sickness or disability when indemnity is claimed. Evidence as to incompetency seems to be decided definitely by a report given by an osteopathic physician, and it probably would have been a good deal worse had it been given by a chiropractor, in connection with a supposed disability suffered by a policyholder. The company was unable to determine whether the claim is for accidental injury or sickness. The original report, omitting all names, was as follows:

"Diagnosis:

- 2nd dorsal rotated to left.
- 3rd dorsal rotated to right.
- 4th dorsal rotated to left.
- 2nd rib sprung (on left side).
- 3rd rib sprung (on left side).
- 4th rib slightly slipped on left side."

This diagnosis is given upon the regular bill head of the osteopathic physician, and offered as a basis for settlement of the claim of the policyholder. We agree with the representative of the insurance company who wrote us that "it seems evident that the policyholder was in a 'heluva fix' with so much the matter with him". We also agree with the representative who says: "Seriously, it does seem that this sort of thing is all wrong. We cannot understand why intelligent people will continue to patronize such practitioners. And we also fail to understand why insurance companies should be forced by law to pay claims for disabilities based upon such ridiculous statements as the one we have exhibited to you."

#### COPYRIGHT GLASSES

(The following editorial, from the American Journal of Ophthalmology, June 1931, written by Dr. Edward Jackson, of Denver, was brought to our attention by Dr. E. J. Marsh, of Paterson, and is reproduced here to show the ramifications of deceptive advertising. The italics are used by the Editor, for emphasis.)

The patent medicine and the counter-prescribing druggist have been particularly offensive forms of quackery. But the medical profession as a whole, by the prescription written in Latin, delivered as the climax of applied wisdom in each case, has fostered the superstition that the proper way to seek health was to swallow something that came out of a drug store. Operations in the hands of untrained surgeons have served the uses of quackery ever since Lister made it relatively safe to cut and



sew the human body. There is danger that similar superstitious faith may be attached to the wearing of glasses.

Most of the present popular errors about medicine have taken their origin in teachings of the medical profession; which, often incorrect to start with, take hundreds of years to disappear from popular tradition and belief. When spectacles were first introduced, it was with very little knowledge of what they were needed for, or how they could help sight. They were worn for ornament, or a kind of magic, or because they were the latest style. Probably there was reason for that chapter in Beer's book on "Present rage for wearing glasses".

In the 50 years since the medical profession began to be interested in errors of refraction and accommodation, spectacles have been accepted only partially as a medical resource. Headaches are still treated by aspirin, or by the newest coal-tar derivatives that are still claimed to be free from the "habit-forming danger". Or, perhaps, the "doctor" wears glasses given to him by an enterprising optometrist, while he declaims against the counter-prescribing druggist. Quackery flourishes in the borderland of medical knowledge. Electricity, physiotherapy, the x-ray, massage, osteopathy, chiropractic, and the ultraviolet radiations that confer marvelous properties on a certain cigarette, divide popular favor with the drug-store substitutes for narcotics. It was too much to hope that spectacles would not attract the attention of quacks.

When printing was invented, it became so easy to reproduce any writings, that laws were devised to protect the interests of authors in their own productions. After it was shown that copyrights could have and protect property values, they were sought for the purpose of creating and perpetuating trade monopolies. Practically no "patent medicines" are really patented. They are made and sold under *copyrighted names*; a copyright being, theoretically, equivalent to a patent. A patent is granted on a *published specific description of the thing* for which the patent is sought. The *copyrighted name*, used as a trademark, can be given to *whatever the owner of the copyright chooses to sell* under it. For medicines, the copyright became popular because it allowed *secrecy and false claims* based on some secret ingredient or process. The secret, proprietary, widely advertised "patent medicine" might be as good a preparation as could be compounded from the same drugs by a skilled pharmacist. But, the elements of secrecy and of misrepresentation in the interest of manufacturer or salesman, as well as the opportunity to sell at one time under the advertised name, something different from what had been sold under that name before, placed it out of the class of drugs that could be prescribed and relied on by the careful, conscientious physician.

So numerous did these pharmaceutical preparations become, so blatant were the claims made for them by the proprietors of their copyrighted names, so often were they introduced by being pressed on the attention of physicians, and so often were they later advertised to the public in the daily papers, that the American Medical Association was compelled to establish its Council on Chemistry and Pharmacy, whose function is to examine and pass upon the character and claims of every drug with a copyrighted name that is advertised to the profession or the public. The work of the Council has done much to limit this abuse of copyright laws; although the opportunity to advance false claims under a copyright name is still

attractive enough to keep up the fraudulent practice wherever the medical profession is not sufficiently watchful.

Recently, the great manufacturing optical companies have shown a disposition to follow the example of the chemical works manufacturers and dealers, by putting out *their spectacle glasses under copyrighted names*. Sometimes it is the *special curves* they have calculated, but have not published, for which they claim a magical accuracy which sounds good to the eye physician or the cataract surgeon who is not particularly familiar with mathematical optics. Sometimes it is the *wonderful polish* of the copyright lens that is emphasized; but *most frequently*, it is the chemical composition that will *avoid glare* for eyes protected by glass sold under the copyrighted name. But, in all cases, the *real objective* is an *increase in the income of the makers and venders of these glasses*, to be attained irrespective of the intelligence of the oculist or the financial interest of the wearer.

Various remedies are possible for this *abuse of advertising opportunities* to add monopoly profits to those of legitimate trade. Since the counter-prescribing druggist has sometimes been induced to include spectacles among his proprietary remedies, the Council of Chemistry and Pharmacy might extend its field of operations so as to include glasses sold under copyrighted names. The Bureau of Standards might be authorized to test the various glasses manufactured under copyrights. Or, the American Committee on Optics and Visual Physiology might be directed to consider the matter. But an intelligent interest in the scientific facts regarding the refraction of oblique pencils of light rays, and as to the selective influence of glasses on light and various other radiations associated with light, would prevent ophthalmologists from assisting the pursuit of added profits through unethical advertising and abuse of the laws relating to copyrights.

## School Health Department

### SCHOOL PHYSICIAN'S PART IN HEALTH EDUCATION

Allen G. Ireland, M.D.,

Director of Physical and Health Education, State Department of Education, Trenton, N. J.

(1) Furnishing teachers with data upon which instruction may be based. The findings of the health examination, and statistics of disease incidence, may be used by teachers in the upper grades as the basis of project development and lesson planning.

(2) Helping with the development of pupil attitudes. Every contact with the pupil represents an educative situation. To the child, it is an experience. What he derives from it may be good or bad, positive or negative. It is an opportunity, therefore, to create good impressions which may permanently fashion the child's conception of all doctors and all medical affairs. No matter how brief, say or do something to convey a message of positive health value to the pupil.

(3) Instructing teachers concerning personal and classroom practices. The physician's knowledge should be available to principals and teachers. Through carefully prepared talks, he can

convey valuable information relative to the following:

- (a) Personal hygiene for the teacher.
- (b) Findings of the health examination.
- (c) School hygiene and sanitation.
- (d) Conservation of vision.
- (e) Signs and symptoms of communicable disease.
- (f) Simple first-aid measures.
- (g) Heating and ventilation.
- (h) Essentials of mental hygiene.
- (i) Seating and posture.
- (j) Recognition and treatment of malnutrition.
- (k) Recognition and care of the tired child; the nervous child.

(4) Conducting assembly programs on health topics. Talks to pupils may include a wide range of topics. They should be well planned and kept within the scope of the pupil's understanding. Medical terms and details should be omitted. Moving picture films and stereopticon slides add greatly to the interest and they are readily procurable at little expense.

(5) Holding group conferences with parents. Organized meetings for parents hold great possibilities and, in some communities, they are very popular. They must be made practical and interesting to keep the parents coming. An occasional guest physician, such as a psychiatrist or a pediatrician, will often attract an audience. The meetings may be general in character, open to all parents; or small conferences may be tried, to which the mothers of pupils with like defects are invited. One month, for example, malnutrition would be the topic; another month, defective vision and care of the eyes; again, the nervous child.

(6) Holding personal conferences with selected reference cases. The aid of the physician may occasionally be enlisted to good advantage for conferring with individual pupils. A confidential talk, especially if the pupil is a boy, may do more than anything else to correct an attitude or modify the manner of living.

(7) Advising pupils as to the selection of vocations. School physicians and nurses should utilize contacts with the pupils of the junior and senior high schools to discuss health in relation to anticipated work or schooling. For example: (a) Discussing the field of nursing with girls who express an interest in that profession. Advising them concerning high school courses that will provide the best foundation. (b) Advising pupils, who are leaving school to go to work, with respect to fitness for certain occupations. The findings of the health examination may be taken as the basis together with other information concerning the pupil. The facts may then be compared with the nature of the work, whether indoors or outdoors, standing or sitting, exposure to cold or heat, close or far eye work, and so on.

(8) Suggesting the application of hygiene in certain school situations. The school situations in mind are the shops, kitchens, sewing rooms, and commercial departments. Presumably, the pupils found there are preparing for industry or commerce or for home-making. The opportunity for applying and teaching practical hygiene and sanitation is obvious. In most instances the physician will find that the essentials are observed and taught, but he may be able, by reason of his special knowledge, to detect an omission or to give emphasis to something important.

The possibilities are many but the following suggestions will illustrate their scope:

- (a) Heating and ventilation.

(b) Lighting, especially in typewriting, book-keeping, and sewing rooms.

(c) Furniture with respect to posture and comfort.

(d) Fly prevention and extermination.

(e) Provisions for first-aid.

## Communications

### NEW JERSEY CONFERENCE OF SOCIAL WORK

Miss Maud Bryan Foote, Executive Secretary

There was created by an act of the Legislature of 1931 a law providing for relief of the aged in New Jersey. This law provides for a county bureau of old age relief in each and every county. The members of this Board, to be appointed by the Freeholders in each county, will be 5 citizens of the county, 2 of whom must be women. The Board will serve without salary.

The Conference, being pledged to a policy of impartiality in all legislative matters, took no part either for or against this bill. The Board of Directors, however, feels that the choice of the membership of these County Boards of Old Age Relief should be a matter for careful deliberation and wise decision on the part of the Freeholders, in order that the old age relief,—and outdoor relief as well, in those counties where it has been placed on a county basis—may be administered impartially, justly, efficiently, and economically.

The Board wishes, therefore, to urge *most strongly* all citizens who are interested in bettering standards and in keeping high those that are already so, to see personally all the Freeholders in his or her county, in order to demonstrate as wide an interest as possible in the appointment to these Welfare Boards of persons of known integrity, ability, disinterestedness, and social vision.

Already, hundreds of applications for old age relief have been received. It will require personnel with training and experience in social work to handle these cases competently and expeditiously in order that the law may be put into effect smoothly and with no inconvenience to those legitimately entitled to relief.

This Act, Chapter 319, Laws of 1931, will take effect on January 2, 1932. Before this date, the County Welfare Boards must be appointed. It is therefore important that this question be taken up with the Freeholders as soon as possible. This, the Board of Directors of the New Jersey Conference of Social Work, earnestly urges everyone to do.

### SURVEY OF CHRONIC ILLNESS IN NEW JERSEY

(A letter from Commissioner William J. Ellis, Department of Institutions and Agencies, Trenton.)

A survey of chronic illness in New Jersey is being made by the Research Division of the Department of Institutions and Agencies at the request of the State Legislature.

The significance of chronic disease as a community problem is indicated by the fact that 54% of the deaths in New Jersey during 1930 were caused by chronic disease.

As part of this survey, a census will be taken



of all chronically ill patients known to health and social agencies, and institutions of the following types are being asked to participate; hospitals, nursing homes, visiting nurse associations, private homes for the aged, county and municipal welfare houses, and social case-work agencies. The survey will determine the number of persons in New Jersey who are chronically ill, and the type of care which they are receiving. Such information should be available as a basis for estimating the needs, in various communities, for special facilities required by this type of patient. For the purpose of the survey, the chronically ill (excluding pulmonary tuberculosis and mental disease) are defined as "persons who have been or are likely to be incapacitated by disease for a period of 3 months or more, and whose illness may continue for an indefinite period".

Chronic, physical disability is determined largely by diseases of the heart and arteries, organic affections of the nervous system, cancer, nontuberculous disease of the lungs, the various forms of rheumatism and Bright's disease, diabetes mellitus, and all disturbances of the glands of internal secretion or of metabolism. (Social Work Year Book 1929.) There also needs to be considered the crippled, both those whose condition requires prolonged rehabilitative treatment and those termed the helplessly crippled, who mainly present a problem of custodial care.

With the marked increase in the span of life, which has occurred during the past 20 years, we are not surprised that many persons who have reached old age are suffering from some chronic disease. However, it is important to realize that these diseases are not confined to the aged. In a recent census taken in New York City, 20,754 persons chronically ill were reported. While a third of this number were more than 60 years of age, another third were children under 16; half of the remainder being between 16 and 40 years of age. (The Care of the Chronic Sick, by Mary C. Jarrett, Welfare Council of New York City.)

It has been pointed out that chronic diseases, more than other types of sickness, present not only medical but serious social and economic problems. Many families, who could meet the expense incident to acute illness of short duration, are unable to pay the costs entailed by sickness which continues over long periods of time. To give care in the home, to a bed-ridden patient who is seriously sick for many months, presents difficulties under any conditions. With the increasing trend toward urbanization, and the resultant smaller quarters for all families; with the specially inadequate housing for many families of the low-wage group in our cities, the difficulties become so great as to make it practically impossible to give even a minimum of the care needed by members of the family who are chronically ill.

Medical and sanitary science has learned to control to a remarkable degree the infectious diseases, and communities in most instances have provided generously for persons acutely ill. With this step accomplished, increasing prevalence of the chronic diseases becomes evident, and another challenge is presented to the medical profession and to the community. It should be added here, that authorities in the medical profession have expressed the belief that progress, in the fields both of medical and social treatment, of the victims of chronic disease has been retarded by the common tendency to term all persons chronically sick, as "incurable". Dr. Boas has said that use of this term "involves the assumption of inevi-

tableness and leads those victims of disease to be regarded as useless derelicts rather than as patients in need of medical attention". Certainly this assumption will not make for progress in development of medical science, or of the necessary community resources for study of the type of disease which constitutes one of our serious public health problems.

As part of the proposed census an effort will be made to secure from those who are most closely in touch with the situation a picture of the medical, social and economic problems resulting from chronic disease, and authoritative opinions as to the facilities needed in different communities to give the chronically ill adequate care. In this phase of the survey we will need to consult many physicians throughout the state, for advice and guidance, and we hope to secure their interest and coöperation in all phases of the survey.

### CRIPPLED CHILDREN'S COMMISSION

(A Letter from Mr. Joseph G. Buch, Chairman.)

The recent epidemic of infantile paralysis will doubtless leave a certain number of cripples. Because of prompt administration of serum in the majority of cases during this year's epidemic, we hope that the total number of those left in a crippled state will not be so great as that of the 1916 epidemic.

It is the desire of the New Jersey Crippled Children's Commission, with coöperation of the Members of the Medical Society of New Jersey and the State Board of Health, to conduct a state-wide survey to ascertain the number, and condition, of cripples produced by this year's epidemic.

Prevention of deformities, and restoration in so far as possible, for those afflicted, are the problems to be dealt with. The problem of how to prevent deformities is complex. To some extent it is a problem for physicians, but there are in addition social, educational, and financial aspects which should command the interest of all public-spirited citizens.

We are told that a large percentage of the operations required by those previously afflicted by infantile paralysis are for the correction of deformities which could have been prevented by proper attention during the early convalescent period. This neglect is largely due to failure of the parents to appreciate the great length of time over which pains-taking care must be given to those afflicted.

In the proposed survey we will be particularly interested in locating families not in a position financially to provide the necessary professional after-care, mechanical apparatus, etc.; particularly in view of the fact that if proper care is given during the convalescent period it will to some extent minimize occurrence of deformities. In addition, it is sometimes necessary to educate the parents as well as the afflicted child, because it is oft-times hard for them to realize how long and unremitting must be their care, and how serious will be the price the child pays unless this proper after-care is provided.

It is the intention of our Commission to continue this survey, if necessary, for a period of years, so that we may ultimately present a comprehensive report concerning infantile paralysis in New Jersey, its subsequent crippling deformities, and the steps necessarily to be taken to relieve the unfortunate victims of that disease.

There is no desire on the part of this Commission to direct any patient away from any doctor. Instead, we will urge afflicted patients to continue treatment by their own physicians.

In the event that the survey brings to light any neglected cases—persons not receiving treatment—particularly instances among the very poor, and conditions due largely to poverty, it will be our privilege and our purpose to direct such unfortunates to regular physicians and institutions where proper treatment may be obtained, and to assist in procuring for them such treatment, appliances and after-care as may be needed.

### HOW PRACTIPEDISTS ARE MADE

(A letter to the Editor from a friend in Chicago, who chanced to see, and read, our November Journal.)

Dear Doctor Reik: Your comment, page 878, on the *practipedist* gives us the chance to say that this term is one coined by the "Dr. Scholl" firm, of Chicago, conducting what is called a school, to which the store clerks are invited. They listen to talks, *lectures*—if you please—on how to fit shoes to feet, particularly to feet that are hard to fit. After attendance on these "lectures", Scholl issues to them engraved certificates, as graduates of his school of "Practipedists". These diplomas are to be seen on the walls of some shoe stores, where Scholl's foot appliances are for sale.

Shoe salesmen possessed of this diploma are presumed to be qualified to tell any inquiring physician, or other person, what his foot ailments are and how they may be corrected. Any physician in regular practice should find such instruction a source of "amusement"—as you have suggested.

### IMPORTANT NOTICE CONCERNING HEALTH AND ACCIDENT INSURANCE

A letter, dated November 25, from Dr. Frank W. Pinneo, Chairman of the State Society Committee on Health, Accident, Life and Automobile Insurance.)

The Commonwealth Casualty Company, of Philadelphia, which writes our accident and health policy, has been merged with the Independence Indemnity Company. This merger makes for a still larger company with greater resources and, we believe, continuance of all the advantages we have hitherto enjoyed, including our satisfactory relations with the Claims Department, the one you deal with in case of accident or illness.

You are being addressed by them in explanation of the new developments. E. and W. Blanksteen, 76 Montgomery Street, Jersey City, will be the managers for the whole state with sub-agents in the counties. The Way-Conklin Agency, at Newark, continues as before in its territory.

We believe this progressive move will further advance the interest of our members in our fine accident and health insurance policy. The consolidation, or merger, mentioned above, is approved by our committee.

## Woman's Auxiliary

### EXECUTIVE BOARD MEETING

(Communication from Mrs. George M. Culver.)

The next meeting of the Executive Board of the Woman's Auxiliary to the Medical Society of New Jersey will be held at the Stacy-Trent Hotel, in Trenton, Monday, January 11, 1932.

The meeting will open at 11 a. m., and luncheon will be served at 1 p. m., after which there will be a speaker.

All members of all the County Society Auxiliaries are cordially invited to attend, and every one is asked to exert every effort to make this a banner meeting.

Presidents of county auxiliaries are asked to make reservations for their members through their treasurers, and checks for total number of luncheon reservations should be forwarded to Mrs. George N. J. Sommer (120 West State Street, Trenton, N. J.), several days in advance, in order that she may know the total number to be prepared for. The price of luncheon tickets is \$1.50 each. Reservations must be in the hands of Mrs. Sommer on or before January 8.

### WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

(Items for State Society Journals, received from Mrs. M. P. Overholser, Harrisonville, Missouri.)

We regret to announce that Mrs. Walter Jackson Freeman, our national auxiliary president-elect, is yet detained in Europe by the illness of her son.

Many auxiliary members are enthusiastic about the sale of Hygeia; some are indifferent. What, would you say, is the occasion for this difference in attitude? Would it not be a safe wager that the indifferent woman is one who does not see and read Hygeia? Familiarity, in this case, is a cure for indifference.

Did you know that Hygeia subscriptions through auxiliary efforts are 50% greater now than they were at this time last year?

Did you contribute to this increase? If so, congratulations to you. Keep up the good work. If you did not so contribute, join the army now of those who read Hygeia and want to spread its gospel.

One of the approved uses to which your community's share in the funds from the Tuberculosis Christmas Seal Stamps may be applied, is the placing of Hygeia in the public schools. To extend the number of Hygeia readers is the one request that has come to us from the American Medical Association. Here is a goal and one of the many ways to that goal. Here are 2 other good suggestions: Plan to use subscriptions to Hygeia as Christmas gifts. Send to Hygeia publishers, lists of heads of families where Hygeia is not taken but where it might be appreciated.

The new President, Mrs. C. R. Phillips, of the Pennsylvania Auxiliary, makes a fine appeal for cooperation and brings to mind this good-for-us-all quotation:

"Think not that a leader can alone achieve,  
She needs the help of others who believe

The cause is just.

It matters not where praises are bestowed;



It matters much that others share the load,  
Women who gladly give their strength and hours,  
Who sacrifice themselves and all their powers."

Wherever Medical Societies and Associations give active encouragement to the formation of Auxiliaries, organization will go forward rapidly.

New Orleans is entertaining this November the Southern Medical Association and its Auxiliary. In May, that city will be host to the State Medical Society and Auxiliary, and to the American Medical Association and its Auxiliary. Thus is the tradition of southern hospitality maintained and justified.

Mrs. A. B. McGlothlan, in October, made an 18 days' trip through the western and northwestern states, following an itinerary mapped out by the national chairman of organization, Mrs. James Blake. Discovery of fine work in many states, and giving inspiration everywhere, were incidents of this tour. For example, in Colorado the Education Envelopes of the Auxiliary are provided for the State University Extension service, and the State Traveling Library service, and for all County Auxiliary chairmen.

The following extract is from the resolutions passed by the House of Delegates, Oregon State Medical Society, October 24, 1931:

*Whereas*, the Woman's Auxiliary has made notable progress during the past year in organizing the wives of physicians and interesting them in the dissemination of sound health information to the lay public, particularly in their various local clubs; and

*Whereas*, the aid of the Auxiliary is indispensable in the promulgation of such knowledge and assisting the medical profession in the work of educating lay people to the great truths of scientific medicine;

*Therefore; be it Resolved*, that the House of Delegates of the Oregon State Medical Society expresses to the Woman's Auxiliary a deep appreciation of its invaluable services and pledge wholehearted support to future Auxiliary programs.

The interested cooperation received, by the Auxiliaries, from the State Medical Associations, in Oregon and Washington, is speeding up organization in those states. Such assistance counts, there as well as in Louisiana. However, good organization reports come also from California, Iowa, Missouri; and it is highly probable they, too, have interested Medical Associations.

Excellent Public Relations activities and Philanthropic work are reported from the Mississippi Auxiliary. A contribution of \$2500 by the Auxiliary to the preventorium fund for the Sanatorium indicates an efficient financial chairman.

The Auxiliary in Georgia has been inspired this year by an impressive address, "Why Have an Auxiliary?" given in Savannah, July 29, by Mrs. S. T. R. Revell, President-Elect of the State Auxiliary. "If the object, person, or organization is worthy, then give auxiliary service." Mrs. Revell pays deserved tribute to the Georgia Medical profession, in general, and to certain of its immortals, in particular.

#### Essex County

Reported by Mrs. F. J. McCauley

The Annual Meeting of the Essex County Auxiliary opened the season in a very promising way. About 75 women gathered at the Newark Athletic Club at 1 p. m. on Monday, October 26, for luncheon and an address by State Senator Joseph G. Wolber.

A lively business meeting followed. Mrs. H. Roy Van Ness, who is now State Auxiliary President, as retiring President of the Essex County Auxiliary, presented Mrs. Theodore Teimer, our incoming President, with a new gavel.

The women are pleased to make known that they have completed plans, for the five-minute radio talks, sent out by the A. M. A., to be given each Tuesday afternoon, at 3:30, over Station WAAM in Newark. 'One of our local physicians will do the broadcasting.

Our work for the coming year will be concentrated on the Society for the Relief of Widows and Orphans of New Jersey physicians, and our Mother Agency and Scholarship Fund. All widows of physicians who were members of the Essex County Medical Society may receive the State Journal by informing Dr. Henry C. Barkhorn, 45 Johnson Avenue, Newark, N. J., that they so desire.

Miss Julia Teimer, accompanied by Miss E. Wohlforth on the piano, rendered a few vocal selections. Mrs. Earl Snively, of Newark, was chairman of arrangements.

The new Executive Board for Essex is as follows: President, Mrs. Theodore Teimer, Newark; President-Elect, Mrs. Frank McCauley, Glen Ridge; Vice-President, Mrs. Samuel Jesserum, Newark; Treasurer, Mrs. Don Epler, Newark; Secretary, Mrs. W. Forsythe, Newark; Council, Mrs. H. J. F. Wallhauser, Mrs. Earl Snively, Mrs. James Froehlich, Mrs. Charles Rich, Mrs. William Crecca and Mrs. R. M. Rogers.

#### Letter from Mrs. R. M. Rogers

Our new President, Mrs. Theodore Teimer, entertained the Executive Board in her home, on November 17, and after a most delicious luncheon the Board settled down to more serious business.

The following committee chairmen were appointed: Membership, Mrs. Charles Rich; Entertainment, Mrs. Earl Snively; Hygeia, Mrs. J. C. Froelich; Publicity, Mrs. Richard M. Rogers; Society for the Relief of Widows and Orphans, Mrs. H. J. F. Wallhauser; Health Education and Program, Mrs. George A. Rogers; Public Relations, Mrs. David A. Kraker.

Plans were discussed for a benefit theatre party to be held in January, to aid the Scholarship Fund, and Mrs. S. H. Jesserum presented an offer for a Chain of Bridges, the first to begin on November 30.

Dr. Alfred Stahl, Chairman of the Radio Lecture Committee, of the Essex County Medical Society, met with us to discuss the radio program which we have been broadcasting every Tuesday afternoon at 3.30 p. m., from Station WAAM. This broadcast is now to be turned over to Dr. Stahl's committee. Incidentally, we all had an opportunity to hear that day's program—"The Treatment of Fractures"—and we were enthusiastic; and this very brief but extremely interesting talk was followed by a series of pertinent remarks on various health problems; all of the material broadcast was obtained from the American Medical Association.

#### Gloucester County

Reported by Mrs. Henry B. Diverty

The Woman's Auxiliary to the Gloucester County Medical Society held its regular meeting at Hotel Pitman, Thursday, November 19, at 9 p. m., at the same place and hour as the County Medical Society, with the President, Mrs. Elwood Downs,

presiding. The membership was well represented.

The Treasurer reported all bills paid and a small balance in the treasury.

After the regular business, a Director from the Executive Board of the Woman's Auxiliary to the Medical Society of New Jersey presented papers and booklets prepared for the good of the auxiliaries and general public; urging their use. After looking them over and discussing how and when to use them, we adjourned.

We had about an hour together socially, which everybody enjoyed, as we are becoming better acquainted.

After the meeting adjourned we joined our doctors in the dining room, where a fine collation was served.

### Hudson County

Reported by Mrs. James Murphy

The Woman's Auxiliary to the Hudson County Medical Society held its monthly meeting November 2, at the Y. W. C. A., President Mrs. George M. Culver presiding; with a large number of the members in attendance.

The business session was brief; plans were made for a meeting on the first Monday in December, and for the annual card party, sometime in mid-winter, probably in January.

The guest and speaker for the afternoon was Mrs. H. Roy Van Ness, of Newark, President of the Woman's Auxiliary to the Medical Society of New Jersey. Mrs. Van Ness told of the strength of the organization, which has nationally more than 12,000 members, and has state branches in all but 7 states; New Jersey being well to the fore. She spoke also of the widespread influence of such groups of women, particularly in aiding any campaign for public health education. She advocated some study for the members, and suggested that much good literature for such purpose may be obtained from the state or the national auxiliaries. She suggested a plan whereby there might be greater cooperation among the different county auxiliaries in New Jersey.

At the close of Mrs. Van Ness' address, Mrs. F. Nicholson was appointed Chairman of the Committee on Health Education, and Mrs. F. Facciolo, Chairman of the Committee on Public Relations.

Mrs. Van Ness received a bunch of pink roses; tea and a social hour followed.

Members were asked to plan to attend the State Meeting to be held at the Stacy-Trent Hotel, Trenton, New Jersey, on Monday, January 11, 1932, at 11 a. m.

### Hunterdon County

Reported by Mrs. G. B. Tompkins

The autumn meeting of the Woman's Auxiliary to the Hunterdon County Medical Society was held at the home of the President, Mrs. F. A. Thomas, Flemington, on November 6.

The following officers were elected for 2 years: President, Mrs. I. T. Topkins, Califon; First Vice-President, Mrs. F. H. Decker, Frenchtown; Second Vice-President, Mrs. T. B. Fulper, Hampton; Secretary, Mrs. William E. McCorkle, Ringoes; and Treasurer, Mrs. V. C. Hyde, Flemington.

A Benefit Bridge Tea was held November 17 at the home of Mrs. Grenelle B. Tompkins in Flemington. Guests were present from this county

and a number from Trenton. The proceeds will help to carry Christmas cheer to patients at the Glen Gardner Sanatorium.

### Mercer County

Reported by Mrs. George N. J. Sommer

Mrs. H. Roy Van Ness, of Newark, President of the Woman's Auxiliary to the Medical Society of New Jersey, spoke on "Organization" at the buffet supper meeting of the Woman's Auxiliary to the Mercer County Component Medical Society, held on Thursday evening, November 12, at 8.30 p. m., at the Trenton Country Club. Other guests included: Mrs. Kate Burr Johnson, Superintendent of the New Jersey State Home for Girls; Dr. Ada Z. Wright, Medical Director of the Home; and Mrs. Charles F. Adams, President-Elect of the State Auxiliary. The Executive Board of the Hunterdon County Medical Auxiliary was also in attendance.

Mrs. D. Leo Haggerty, President, conducted the meeting.

Arrangements for the session were made by Mrs. J. Oliver McDonald and Mrs. A. Dunbar Hutchinson.

Greetings were extended by Mrs. Frank G. Scammell and Mrs. John B. Sill, former Presidents of the County Auxiliary, and members of the Advisory Board of the Society. A vote of thanks was extended to Mrs. William C. Ivans, Chairman of the Speakers' Bureau on Public Health, for work she has accomplished in putting the question of public health before the Parent-Teacher Associations in this city.

## County Society Reports

### ATLANTIC COUNTY

John S. Irvin, M.D., Reporter

The stated monthly meeting of the Atlantic County Medical Society was held at the Chalfonte Hotel, Friday, November 13, with the President, Dr. Norman J. Quinn, in the chair.

Dr. Walt P. Conaway, Chairman of the Committee on Broadcasting Public Health Talks, stated that the program series would be resumed this month and continued every Thursday at 5.15 p. m., from Station WPG. The initial presentation, under the auspices of the County Society, will be given November 26, and continued until March, at weekly intervals.

Dr. William J. Carrington said that the State Society Rutgers' Extension Course will be continued this year and will include 6 lectures, for the reduced fee of \$15. The President appointed the following committee to promote the sale of these courses: William J. Carrington, Chairman; Robert A. Kilduffe and D. Ward Scanlan.

The following applications for membership were presented: Jacob Handloff, Associate Membership; William J. Doherty, Active Membership.

An invitation was read from the Abbott's Dairies, asking the society to hold some future meeting at the local plant; it was decided by vote that this invitation should be accepted.

In response to a letter from the State Society, asking for the appointment of a Maternal Welfare Committee for the county, the following



committee was named: Milton S. Ireland, Chairman, Myrtle Frank, and Norman J. Quinn.

The President requested the present Board of Censors to act as a committee for coöperating with the State Society in preparing new application blanks for the component societies.

Mr. Fox, a representative of the Credit Rating Bureau, explained the manner in which the bureau is operating. It being deemed inadvisable for the Society to take membership as a body, the Society endorsed the Credit Rating Bureau and urged individual members to subscribe.

Dr. John S. Irvin reported briefly his impressions of the recent Annual Conference of Secretaries and Reporters held in Trenton. (See complete record of proceedings in this Journal, Department of Current Events, Ed.)

The President appointed the following Nominating Committee to select officers to serve for 1932: Theodore Senseman, Chairman, W. Blair Stewart, John S. Irvin, and Harold S. Davidson.

The scientific program consisted of talking moving pictures presented by a representative of the Petrolagar Laboratories; portraying the anatomy of the female pelvis and perineum, and demonstrating experimental gastro-enterology.

#### Atlantic City Hospital Staff

Joseph H. Marcus, M.D., Secretary

A meeting of the General Staff of the Atlantic City Hospital was held October 23, at 8:30 p. m., with Dr. Milton S. Ireland, as President.

The scientific program was presented by Dr. J. William Hughes, Jr., Resident Physician, who presented a paper entitled *Reduction of Fractures and Dislocations under Local Anesthesia*.

This practice has been known for the past 50 years, having been first attempted by Conway, in 1885. The first comprehensive reports appeared in 1907, when Drs. Lerda and Quenú reported 15, and 30, cases respectively, and stated that all simple fractures of the extremities were reduced perfectly, with complete muscular relaxation and absence of pain. In 1909, Quenú offered a similar report on the reduction of dislocations under local anesthesia. Professor Bohler, of Vienna, has probably done most work in this line, using local anesthesia for the reduction of all fractures, whether simple or compound. However, many men feel that it is contraindicated in compound fractures, and fractures where there is infected or traumatized skin.

There is no doubt of its being a practical and safe method, through eliminating the complications of general anesthesia, and the ease with which fractures may be reduced in a doctor's office eliminates hospitalization and reduces the cost of operation to a minimum.

**Technic.** The anesthetizing substance, novocain or cocain, is injected directly to the site of fracture; a small wheal is first raised in the skin, then 10-20 c.c. solution of novocain ( $\frac{1}{2}\%$ ) is injected into the area between the fractured ends of the bones, in such manner that the bone marrow, hematoma, periosteum and surrounding tissues become completely impregnated. One drop of adrenalin chloride may be added to each cubic centimeter of novocain, to prevent further hemorrhage from manipulation. The hematoma attending the fracture offers a perfect disseminating medium for the anesthetic, the infiltrated area becomes painless in 8-10 minutes, and there will be perfect muscle relaxation. If the first

attempt at reduction fails, the area still remains anesthetized for further manipulation, and as much as 60 c.c. of solution may be injected, depending on the type of fracture and the size and condition of the patient.

In the reduction of *dislocations*, the method is very much the same except that the solution is injected at both the proximal and distal ends of the dislocated bones. For example, in a dislocated shoulder, displaced anteriorly, 10 c.c. should be injected through the deltoid muscle from without into the joint cavity, and the same amount injected around the luxated head of the humerus. After 10-20 minutes the articulation may be replaced, during the complete muscle relaxation.

While infiltration anesthesia has been used mostly for fractures of the small bones, it has been used with advantage in reduction of fractured femurs and dislocations of the hip-joint; Quenú mentioned several such cases.

Some surgeons claim that local infiltration surpasses general anesthesia in every way, but practice has shown it best suited in fractures of the lower leg, ankle and fore-arm; whereas in fractures of the upper arm, plexus anesthesia is thought to be better, although local infiltration has been used with astounding results.

Dr. William C. Wescott, Director of the Radiologic Department, presented a report on the International Congress of Radiology recently held in Paris. After portraying the social aspects of this interesting gathering of distinguished radiologists, he talked of the scientific presentations. Approximately 500 papers were presented at the meeting, including 30 on the "mucosal pattern of the gastro-intestinal tract". Papers showing methods of demonstrating the circulatory system by injecting thorium compounds were also presented. The Congress was divided in 6 sections: Radiodiagnostic, radiotherapeutic, radiophysique, radiobiologic, electrologie, and heliotherapie. Prof. Forsell, Dr. Cole, of New York, Lynian, of London, Haenisch of Hamburg, and Milani, of Italy, had been selected to give addresses on special subjects, and each of those presentations was a masterpiece. (Dr. Wescott read an abstract of Milani's address, which was very interesting, and the Editor regrets that the limited available space this month does not permit its inclusion here.)

Dr. Charles B. Kaighn, Associate Radiologist, presented a roentgenogram of a female pelvis showing a mass extending up to the third lumbar vertebra; homogeneous in nature, displacing the transverse colon upward, and extending downward into the pelvis. Diagnosis: Ovarian cyst, with abscess in parametrium.

#### BERGEN COUNTY

Charles Littwin, M.D., Reporter

The regular monthly meeting of the Bergen County Medical Society was held on November 10, at the Holy Name Hospital, with Dr. Joseph Morrow presiding over one of the largest meetings the society has ever held; more than 100 members being present.

The minutes of the last meeting and of the Executive Committee Meeting were read and approved.

Dr. Harry Wolowitz reported for the Committee on Post-Graduate Education that a special course of lectures would be offered about the

first of the year, at a fee of \$15, half the previous cost, because the state is helping Rutgers to finance the work. He proposed consideration of the course embracing "Medicine and Newer Therapeutics".

Dr. Edward Huff requested suggestions for consideration by his committee, on "School Physicians".

Plans for the Annual Dinner were outlined by Dr. Vincent Farmer, whose prospectus seemed to arouse enthusiasm.

A communication from the Maternal Welfare Committee, of the State Society, was read, and Dr. Frederick Hallett suggested that Dr. Harrison Wilson be delegated to inquire into the subject and report later.

An amendment to the By-Laws, relating to Junior Membership, was submitted by the Secretary, as follows:

Chap. III, Section 1-A. Junior Membership. Every regularly licensed physician who has resided in the county less than 1 year shall be eligible to junior membership, which shall not entitle him to vote, to hold office, or to be a member of the State Society or American Medical Association. The admission fee shall be \$5. There shall be no dues.

Section 1-B. Every junior member shall come up automatically for election to regular membership at the end of a year's residence in the county.

This was amended by Dr. A. W. Ward, to read:

"There shall be no dues but the admission fee shall be \$5, which shall be deducted from the dues of the first year if elected to regular membership."

The President appointed the following Committee to study the Clinics and Dispensaries of Bergen County and to report suggestions for better control: Drs. Walter Schmidt, Chairman, Wry, Beyer, Blenkle, Protzman Irwin, Huff, Townsend and Levitas.

A splendid program which aroused widespread interest, followed.

## PROGRAM

### Part I

- (1) Remarks on Annual Conference of Secretaries and Reporters of County Societies, held at Trenton.

Charles Littwin, M.D.

- (2) A Few Thoughts on Therapy for Ailing Medical Practice, neither New nor Official.

Harry Perlberg, M.D.

Secretary, Hudson County Medical Society

- (3) A Timely Campaign for Health Examinations.

Edward G. Waters, M.D.

Reporter, Hudson County Medical Society.

### Part II.

- (4) Gastro-Intestinal Allergy—Causation of Migraine, Colitis, Canker Sores, Abdominal Pain Attacks, etc.

Albert F. R. Andresen, M.D., F.A.C.P.,

Professor Gastro-Enterology, Long Island College of Medicine

## BURLINGTON COUNTY

Roscius I. Downs, M.D., Reporter

The 102nd Annual Meeting of the Burlington County Medical Society was held Wednesday, November 11, at the Community House, Moorestown. President Kuder called the meeting to order at 1.30 p. m. with 18 members present. The minutes of the previous meeting were read and approved.

A letter from the State Society, asking that a local welfare committee be appointed, was read. This is part of a national program started last year by President Hoover. Dr. Kuder referred the appointments to our incoming President.

A letter from the Eastman Teaching Films, Inc., relative to the rental of medical films for programs, was read and referred to the Program Committee.

Dr. Tracy reported for the Publicity Committee: 3 or 4 meetings were held at the hospital; the plan is to have members of the society give medical talks to organizations requesting them; much interest has been shown, with 12 requests made and several talks already given.

Much discussion has taken place during past meetings relative to payment or non-payment of bills by the County. Our President obtained the following from the County Adjuster which covers the subject completely.

In reference to the matter of remuneration for commitments of patients to county institutions and requests from coroners for viewing bodies, the following information has been obtained from the County Adjuster, Mr. Howard Stackhouse:

*Coroner's Cases.* The County Adjuster has no jurisdiction whatsoever over these cases. Bills for such services should bear the written approval of the Coroner requesting the service, and should then be sent to the Freeholder's Clerk. The bill will then be referred to Mr. Lloyd Wright, who has these items under his jurisdiction, and, if he approves, the bills are paid by the Freeholders. For further information see Judge Wells, the County Solicitor.

*Commitment to County Institutions.* The persons authorized to request such examinations, and at the same time to bind the county for payment of the proper fee, are the Superintendent of the Almshouse, the Sheriff, the Prosecutor, and the County Detective. These bills should also receive the written approval of the person above named, requesting such service, and such bills will unconditionally receive the approval of the County Adjuster, provided the patient is committed to a County Institution and is classed as an indigent patient.

In reference to persons committed to the Tuberculosis Institution, the County Adjuster states that he has had no occasion to pass on services rendered for this purpose, as the usual procedure in these cases is to refer them to the Tuberculosis Clinic, which provides examination for the patient and provides admission for those eligible. This examination requires the services of only 1 physician, and no affidavit. Lunacy examinations require the services of 2 physicians and affidavits. All bills for services are to be sent to the Freeholders' Clerk.

*Examinations ordered by the Court* are paid by the Court through a special fund created for this purpose. The bill should be sent to the Freeholder's Clerk. The bill will eventually reach the County Adjuster, but his approval is immaterial,



as it is paid on approval of the prosecutor, or the Judge, through Court funds.

If municipal officials request mental examinations, the fee may or may not be paid by the county on authorization of the County Adjuster, depending on whether or not the patient is eventually placed in a county institution, and on whether or not he is classed an indigent. If the patient is not committed to a county institution, the municipality is responsible for the payment of the bill. Drunks, and transient commitments to city or town jails, do not come under the classification of county charges, and bills for medical examinations of such persons are not referable to the County Adjuster.

If the State Police commits a person to the county jail, the person committed comes under the ruling of a county charge. If the State Police brings the person before a municipal or township magistrate, the municipality or township is responsible for the fee, if any is to be obtained. No bill is paid by the County Adjuster, but all are referred to the particular freeholder having jurisdiction in that particular department for which the services were rendered.

The County Adjuster also suggests that in cases where separate agencies are responsible for the requests for various examinations, separate bills should be rendered. For instance, the bills for a lunacy examination made in the county jail, a drunken driver examination made in a municipality at the request of a municipal officer, and a coroner's physician's bill should not all be put on any one billhead, as each of these goes to different sources for approval. To do so, will occasion shifting of the bill from one place to another for approvals, and will cause confusion and unnecessary delay.

It was the opinion of several members that the By-Laws of the society should be changed to allow Dr. Francis F. Borzell to be affiliated with the society, without payment of dues. Dr. Borzell lives in Philadelphia, belongs to the Philadelphia County Medical Society, and is head of the X-Ray Department of the Burlington County Hospital.

In his Bulletin of the Annual Society Meeting, under the heading of "meditor'als", Dr. Tracy wrote the following:

For years, the fear of extension of epidemics of contagious diseases through the gathering of thousands of children in close contact in our public schools has resulted in school boards or boards of health closing many schools. A word from the medical inspector might at times give a better sense of direction to these hysterical epidemiologists with fixed ideas.

This continued and unnecessary procedure of closing schools should convey to the public mind the purpose and the importance of the office of Medical Inspector.

The law creating the office of Medical Inspector fixes a maximum fee of 50c per pupil per year as the payment for the service. There are some physicians who insist on payment of that fee. Many accept the position for no financial reward other than the indirect benefit of public contact. Every medical inspector should insist on payment of his legal fee as much as any other public officer.

In some sections of the state the opening of schools has been indefinitely postponed to pre-

vent the extension of "polio", so the wise moving picture managers are cutting the matinee prices for children to attract the idle youth.

The vigilance of trained school nurses and experienced medical inspectors counts for naught compared to the supervision of the usher at the theatre. Incidentally, the Medical Inspector is given an opportunity for a fishing or hunting trip.

Is it not time that physicians become the leaders for public health ideals rather than these compulsion neuroses members of school boards and boards of health?

Dr. Tracy wished an expression of opinion on the above subject. It was stated that often the position of Medical Inspector was a farce, with no benefit to the school and used only for a political job for some doctor. It was also stated that in other communities many benefits, both the schools and the school children, were derived from the medical inspectors. It was the feeling, however, that with proper coöperation with local boards of education and by following the suggestions of Dr. Ireland, much improvement and usefulness could result.

The annual election of officers for the ensuing year followed.

The Auditing Committee, composed of Drs. Ulmer and Downs, reported the Treasurer's Report correct with a balance of \$74.73.

The Nominating Committee, composed of Drs. Mulford, Bauer and Hunter, presented the following, who were duly elected: President, Howard C. Curtis; Vice-President, John S. Conroy; Secretary and Treasurer, George T. Tracy; Reporter Roscius I. Downs; Censors, Drs. Mulford, Thorn and Dubell; 3 Delegates to State Society, Drs. Newcomb, Tracy and Darlington; 3 Alternates to State Society, Drs. Bauer, Relsinger and Rodman; 1 Delegate and 1 Alternate as member of Nominating Committee of State Society, Drs. Darlington and Tracy; 2 Delegates to Camden County Society, Drs. Shipps and Emlen Stokes; 2 Delegates to Atlantic County Society, Drs. Davis and Ulmer; 2 Delegates to Gloucester County Society, Drs. Downs and Hunter; 2 Delegates to Salem County Society, Drs. Small and Edgar Haines; 2 Delegates to Cape May County Society, Drs. Imhoff and Meyer; 2 Delegates to Ocean County Society, Drs. Thorn and Hollingshead; Chairman Section for Practice of Medicine for January Meeting, Dr. R. D. Anderson; Chairman Section for Surgery for March Meeting, Dr. T. J. Summey; Chairman Section for Obstetrics and Gynecology for May Meeting, Dr. F. D. Fahrenbruch; Chairman Section on Specialities for September Meeting, Dr. W. W. Zwick; Historian, Dr. Joseph Kuder.

Then followed the President's Address presented as only Dr. Kuder could present it. He presented the relationship of the patient to the physician; pictured the view-point and the expectations of the patient to the physician and the physician to the patient; pictured the truths and observations of life itself, based upon his classical education and wide reading. All present are eager for reprints for future reference, for its educational value. Dr. Kuder hoped that he could recall it again if we insisted on its publication.

The meeting closed with a dinner equal to the high quality of the preceding program.

### CAMDEN COUNTY

The regular monthly meeting of the County Medical Society was held in the Camden City Medical Dispensary on Tuesday, November 3, at 9 p. m., with Dr. Hummel presiding.

Drs. John P. Brennan, 306 Cooper Street, Camden; Harold D. Westcott, Clementon; Howard D. Barnshaw, 327 North 37th Street, Camden, and Caspar M. Beideman, 5 West Maple Avenue, Merchantville; were elected to active membership.

Dr. H. L. Bockus, Professor of Gastro-Enterology at the University of Pennsylvania Graduate School of Medicine, gave a very fine presentation of the "Causes of Diarrhea"; his paper being illustrated by lantern slides. This paper was discussed by Drs. Deibert and Sharp, and a vote of thanks was extended to Dr. Bockus.

Dr. Keighn, Honorary Member of the Society, now practicing in Cape May County, was in attendance. There were 63 members present.

### CAPE MAY COUNTY

Eugene Way, M.D., Reporter

The Forty-Eighth Annual Meeting of the Cape May County Medical Society was held at the Bellevue Hotel, Cape May Court House, on Thursday, October 29, at 6 p. m., with President Cryder in the chair and 36 in attendance.

Dr. G. M. Brooks, of Stone Harbor, was elected a member of the society.

Dr. Julius Way, Chairman of the County Welfare Committee, made a comprehensive report, and urged that the "Welfare Act", to be voted on at the November election, be defeated. The report was adopted.

Dr. Dandois, Chairman of the local Committee on "Post-Graduate Course of Study", reported that a splendid course of lectures had been given by the State Society and Rutgers University; Drs. Corson, Mace, Tomlin, C. W. Way and Dandois attended this course, and all were urged to take advantage of this opportunity next year.

The following officers were elected for the year 1932: President, Allen Corson, Ocean City; Vice-President, Warren D. Robbins, Cape May; Secretary and Reporter, Eugene Way, Sea Isle City; Treasurer, H. H. Tomlin, Wildwood; Censor for 3 years, Frank R. Hughes; Delegate to the State Society for 3 years, George F. Dandois, Alternate for 3 years, Oscar Zeigler; Member Nominating Committee State Society, Clarence W. Way; Welfare Committee, Julius Way, Millard Cryder and Warren D. Robbins; Liaison Committee, Warren D. Robbins, Clyde F. Smith, and W. P. Haines.

President Cryder then introduced Judge Palmer M. Way, of the Cape May County Courts, who gave an interesting and instructive address on the work of the various branches of the Court, including the Juvenile Court in which physicians were especially interested, as juvenile offenders were referred to them for physical and mental examinations. He gave a graphic account of the Institution at Jamesburg, where such cases are cared for, and stated that the results of the training received there were extremely gratifying, and urged all to visit the Institution. He was given a vote of thanks by the society.

President Cryder then introduced Dr. George N. J. Sommer, Past-President of the State Medical Society, who gave a wonderful address on "Medical Ethics", using for text a book by Dr.

Percival, published in 1803; this book containing all the essentials adopted by the American Medical Association, and in use at the present time. He stressed the business side of the physician's life, urging care in making investments. He was voted the thanks of the society.

Adjournment was then made for one of the Hotel Bellevue turkey dinners that brings the society annually to this famous hostelry.

After dinner, speeches were made by Dr. Hagerty, President of the State Medical Society, who reviewed the addresses given; complimenting Judge Way and Dr. Sommer. He also spoke of the topographic beauty of the state, with special reference to High Point Park, which all were urged to visit. He also described the efficient work done by the State Welfare and Workman's Compensation Committees, and of the importance of the Post-Graduate Courses.

Dr. Henry O. Reik gave one of his usual eloquent and educational talks, showing the accomplishments of the Welfare Committee and the urgent need of its continuance. He stated that the Post-Graduate Courses were appreciated by the physicians of the state and would be continued with the cost reduced this year to \$15.

Other speakers were Drs. G. M. Brooks, recently from North Carolina; W. Blair Stewart, Philip Marvel, Sr., and Walter B. Stewart, of Atlantic City; H. B. Diverty of Woodbury; and Dr. Ralph K. Hollinshed, of Westville.

It was voted that the time and place of next meeting be left to the incoming President.

### ESSEX COUNTY

Frank W. Pinneo, M.D., Secretary

The society met in the auditorium of the Academy of Medicine at 8.45 p. m., with the President, Dr. Lowrey, in the chair. The suggested amendment to the By-Laws, changing the number of members on Nominating Committee from 3 to 5, was adopted without dissent.

Dr. Henry H. Rusby was unanimously elected an Honorary Member of the Essex County Medical Society, on the strength of his services to the medical profession and loyal interest in the activities and aims of our society; an abstract report of his accomplishments and renowned honors and medals, in America and abroad, being read by the Secretary.

The following new members were elected: Rudolph O. Fager, Philip H. Federman, Elton B. Lafferty, Joseph S. Loder, Arthur F. Mangelsdorff, George A. Paul, Sidney Rosenthal, and Louis M. Sosnow.

The problems of broadcasting medical talks, were discussed, the Secretary reporting receipt from the A. M. A. of copies, of about 100 different 5-15 minute talks for the purpose; these being put in the hands of our Committee on Broadcasting. The Woman's Auxiliary has already arranged for some 5 minute talks to be given weekly, by some physician in our membership, in the name of the society.

The scientific meeting was a "Demonstration Clinic on Syphilis", under the mutual auspices of the State Department of Health and the County Society; addresses being delivered by Drs. Francis J. McCauley, Harrison S. Martland, Charles P. Englander and A. J. Casselman. The attendance was extraordinarily large, about 200 being present, and the interest was noteworthy.



### DR. RUSBY HONORED

Dr. Henry Hurd Rusby was elected an Honorary Member of the Essex County Medical Society at its regular meeting, November 12, 1931, on recommendation of the Council, a summary of his renowned accomplishments in Pharmacy and Medicine being read to the unusually large audience.

Dr. Rusby, of English, Dutch and Irish descent, was born April 26, 1855, in Franklin, now Nutley, New Jersey. He was educated in the local schools and the Centenary Collegiate Institute, in Hackettstown, and later taught at Westfield (Mass.) State Normal School, and in public schools in New Jersey and Massachusetts. His boyhood interest in botany, and the study of plants in his neighborhood, led to his collection of an herbarium of the plants of Essex County which was awarded a medal in the Centennial Exposition of 1876, in Philadelphia. His botanical field studies and collections have taken him on many exploring expeditions: in New Mexico and Arizona, for the Smithsonian Institution; in South America, in 1896, and again in 1917, and a transcontinental journey throughout the Amazon Valley, in 1885-86, and again in 1921-22; in Mexico, for exploration of rubber resources. He graduated in medicine at the New York University Medical College, in 1885, and then registered in Essex County as a physician, but the wonderful properties of cocaine just then attracted great attention in medical circles and he was sent to Bolivia to study the cocoa plant. This also included study of cinchona, and his reports on this subject are the most extensive published; the most recent to appear in the forthcoming number of the Journal of the American Pharmaceutical Association and in the Bulletin of the Torrey Botanical Club. He has been for many years Professor of Botany and Materia Medica of the New York College of Pharmacy (Columbia University); was the first Dean of that College, and has been a pioneer in developing and elevating the study of pharmacy—this being regarded by himself as his greatest accomplishment. For years he has also been a lecturer on Materia Medica in the New York University Medical College, and later in the union of that college with the Bellevue Hospital Medical School. He was for many years a member of the Revision Committee on the United States Pharmacopoeia and of the National Formulary. He became one of a small group, which included Drs. Hobart A. Hare and Horatio C. Wood, which forced recognition of the chemical standardization of drugs. In the American Pharmaceutical Association, Dr. Rusby organized a crusade against adulterated drugs, which resulted in the establishment by Congress of the Bureau of Chemistry, at Washington, with Dr. Wiley at its head. This purifying of the business of drugs, especially certain illicit commercial operations, provoked reprisals and determined, but futile, efforts to get Dr. Wiley removed. Wiley's book—"The History of a Crime"—records the struggles of this long fight for "Pure Food and Drugs". Dr. Rusby's part was as Pharmacognosist of the U. S. Department of Agriculture, with the special duty of examining drugs offered for import at New York. The above experience of government for the good of the people, and the opposition of profiteers who were hurt by the reformation, have been matters of common knowledge.

Dr. Rusby was President of the American Pharmaceutical Association in 1910; President

for many years of the Torrey Botanical Club; one of the incorporators of the N. Y. Botanical Garden, and is still a member of its Board of Scientific Directors. He has been awarded the honorary degree of Master of Pharmacy, by the Philadelphia College of Pharmacy; that of Doctor of Science, by Columbia University; has won the Remington Medal in Pharmacy, and the International Hanbury Medal for his contributions to the chemistry and natural history of drugs; is an honorary member of the British Pharmaceutical Association; one of the authors of the National Standard Dispensatory; is still active as Professor of Physiology and Materia Medica at the Columbia University College of Pharmacy, and as Honorary Curator of the Economic Museum of the New York Botanical Garden.

He and his family reside at Newark, N. J.

### Academy of Medicine of Northern New Jersey Eye, Ear, Nose and Throat Section

Earl LeRoy Wood, M.D., Secretary

About 75 physicians attended the meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey, held at the Eye and Ear Infirmary, Newark, Monday evening, November 9. Dr. Charles W. Buvinger presided.

Dr. Wells P. Eagleton, Medical Director of the Hospital and President of the Academy, held a bed-side clinic and ward rounds, showing several very interesting cases.

Eye, Ear, Nose, Throat and Plastic Cases were shown in the clinic rooms on the first floor. A patient who had been operated upon for glaucoma some time previously, and who is now suffering from failing vision and rising tension, provoked a spirited discussion as to the best indicated procedure.

A buffet lunch was served after the meeting.

### The Academy of Medicine of Northern New Jersey

Adrian Ralph Kristeller, D.D.S., Secretary

The November stated meeting of the Academy of Medicine of Northern New Jersey was under the auspices of the Section of Medicine and Pediatrics, and the guest was John Wyckoff, M.D., of New York City, whose most interesting and detailed paper on "Congestive Cardiac Failure" was extremely well received.

Prior to the meeting, the President entertained a group of cardiologists, so as to permit a round table discussion on the subject.

The President has arranged for a meeting in December, to consider the problem of "Unemployment, from the Medical Standpoint". The guests will not be medical men.

The vast improvement in the auditorium has been noted by the members, and favorably commented on by many.

### GLOUCESTER COUNTY

Henry B. Diverty, M. D., Reporter

The monthly meeting of the Gloucester County Medical Society was held at the Hotel Pitman, November 19, with the following named members and guests present: Drs. R. K. Hollinshead, Edwin R. Ristine, Westville; W. J. Burkett, I.

W. Knight, Pitman; B. A. Livengood, Swedesboro; Chester I. Ulmer, Gibbstown; H. L. Sinexon, Paulsboro; H. M. Fooder, Williamstown; H. W. Stout, Don Weams, Wenonah; William Brewer, Duncan Campbell, C. A. Bowersox, Fuller Sherman, R. M. Moore, Paul Pegau, E. E. Downs, J. Harris Underwood, H. B. Diverty, Harry Nelson and Oram R. Kline, of Woodbury. Dr. Emma Richardson was the delegate present from Camden.

This being the Annual Meeting, the Treasurer reported all bills paid with a substantial sum left in the treasury. This balance was to be placed in a reserve fund for the future. The auditors reported his accounts correct. Reports were given by the delegates to Camden, Cape May and Atlantic counties, and a report was also presented on the seventh annual conference of secretaries and reporters of the Component County Medical Societies of New Jersey, held November 4, at the Stacy Trent Hotel in Trenton. Following this the election of officers for the ensuing year was held. Those elected were: Dr. E. E. Downs, President; Dr. William Pedrick, of Glassboro, Vice-President; Dr. R. K. Hollinshed, Secretary and Treasurer; Dr. H. B. Diverty, Reporter. Three censors for the coming year—Drs. Stout, Sinexon and Ulmer. Delegate to the State Society for 3 years—Dr. Brewer; Alternate, Dr. Ulmer (those continuing, Drs. Stout, Hollinshed, Knight). Member of the State Society Nominating Committee—Dr. Stout; Alternate, Dr. Livengood. One member on the board of trustees for 3 years—Dr. Campbell (continuing, Drs. Brewer and Underwood). Delegate to the County Societies are as follows—Atlantic, Drs. Fooder, Moore and Nelson; Burlington, Drs. Weams, Ulmer, Sherman; Cape May, Drs. Hollinshed and Diverty; Camden, Drs. Diverty, Livengood and Ristine; Cumberland, Drs. Underwood, Burkett, Sheets; Salem, Drs. Ashcraft Ulmer, Wandel and Knight.

The social session of the society was decided to be changed from September to the third Thursday in October.

Following this business, interesting subjects were presented by different members of the society. Dr. Edwin Ristine spoke on heart disease, while Dr. Harry Nelson spoke on a case of tetanus. Dr. B. A. Livengood discussed draining of wounds, and Dr. Chester Ulmer gave his talk on primary infection of the bowels. All these were followed by very interesting discussions by the entire group.

The following committees were then appointed by the President: Essay Committee, Drs. Livengood, Ristine and Moore; Public Relations, Drs. Burkett, Pegau and Weams; University Extension, Drs. Diverty, Hollinshed and Nelson.

Dr. Shroeder, state representative, who has charge of the clinics in South Jersey on tuberculosis, addressed a few remarks to the audience. A fine luncheon was then served by the hotel caterer, to the physicians and members of the Woman's Auxiliary, which held its meeting at the same time and place.

The next meeting of the society will be held on the afternoon of December 10, when the members will be the guests of Dr. J. Harris Underwood at the Underwood Hospital.

## HUDSON COUNTY

### Clinical Society North Hudson Hospital

J. Africano, M.D., Reporter

The regular monthly meeting of the Clinical Society was held Tuesday, November 10, with Dr. F. Pearlstein acting as Chairman. The hospital report for the month of October was read by Dr. Tannert: total discharges, 258; admissions, 242; deaths, 20, of which 8 were surgical, 8 medical, and 1 each gynecologic, pediatric, urologic and new-born.

Dr. W. Braunstein discussed the autopsies performed during the month; one patient was a man of 50 with evidences of cerebral apoplexy, hypertrophied left ventricle, sclerotic coronaries, + 4 Wassermann, and possibly renal syphilis (secondary); microscopic examination of the parenchyma of the kidneys showed glomerular changes, and a spirochetal stain proved that syphilis was the causative factor. Renal syphilis is noted for its severity of symptoms in the secondary stage; and in the third stage is rare and hardly diagnosable.

Dr. Lange discussed the death of one patient, with diagnosis of scirrhus, infiltrating, carcinoma of the pylorus, and early obstructive biliary cirrhosis; a posterior gastro-enterostomy had been performed a year previously, following which the patient improved temporarily.

Dr. Klaus discussed the death of a patient who developed suppurative peritonitis 10 days after a tonsillectomy. The abdomen was full of pus, the appendix congested—not an appendicitis to begin with but a peri-appendicitis—and the patient expired a few days later. On admission the throat showed the usual postoperative grayish-white membrane following tonsillectomy, but unmistakable signs of peritonitis; leukocytes, 15,000; temp. 105°; blood culture positive for streptococcus hemolyticus. This child had seemed healthy at the time of tonsillectomy.

Dr. Tannert explained the complication as having occurred through the vascular route, the channels of infection having been opened by the tonsillectomy.

Dr. Sclinger considered the occurrence most unusual; pneumonia, lung abscess, or, rarely, atelectasis, are the most frequent complications. He cited 1 case in which the "complication" of meningitis followed tonsillectomy, and suggested the previous existence of a chronic condition which flared up after operation but which was not due to the tonsillectomy *per se*.

Dr. Quigley judged that it would be only fair to assume that the peritonitis was a coincidence in respect to time, as in the case of meningitis; the vast majority of tonsillectomies are done without untoward results.

Dr. Kooperman reported upon one death: During operation for chronic inflamed tubes and one ovary, the patient became cyanotic and the anesthesiologist had to allow her to "come out" 3 times, and also to administer stimulants. Shortly after operation she showed signs of bronchopneumonia, to which she succumbed in 3 days. Before operation blood count and urine were normal, and she was classed as a selective risk. Operation lasted 80 minutes; 2 tubes, 1 ovary, and a retrocecal appendix being removed. The question is—whether this death was due to the anesthetic?

The following case reports were presented by members of the Staff:

Dr. Tataryan. "Pregnancy Complicated by Hypertension." It is uncommon to meet the problem



of pregnancy with essential hypertension, as the latter usually does not become very marked until the end of the child-bearing age. There is no evidence that pregnancy in itself is a cause of essential hypertension, but it may serve to bring on hypertension in women constitutionally predisposed; or, hypertension may be activated by pregnancy. Persistent hypertension following pregnancy must be watched, as appreciable symptoms may not be seen until serious cardiovascular or renal changes take place, with nitrogenous retention and toxemia. Even without apparent sign of kidney disease, hypertension existing throughout pregnancy denotes a grave prognosis. In women over 30 years of age, hypertension is a better index of toxemia than urinalysis or blood chemistry; systolic pressure of 140 or more is a fair indication of commencing toxemia, and the rise of both systolic and diastolic pressures indicates that other clinical evidences will follow. Very few women who begin pregnancy with a systolic pressure above 150 or diastolic above 100 can go through pregnancy with a living child.

**Case report.** Mrs. M. S., white, aged 38, gravida v, para iii, last menstrual period Oct. 27, 1930, was admitted June 29, 1931, complaining of headache, spots before the eyes, swelling of feet and ankles, oliguria and hypertension. She had suffered from hypertension 9 years previously and during that pregnancy was admitted to this hospital 3 times between February 18 and May 21.

**Physical examination:** Systolic murmur at apex, not transmitted; aortic second sound accentuated; B. P. 206/102; fundus uteri at level of umbilicus; fetal sounds audible in R. L. Q.; patient very obese. Blood count showed secondary anemia. Blood chemistry: NPN, 37; creatinin 1.5; sugar 85. Urine: sp. gr. 1.020; faint cloud of albumin; some epithelial and white cells. Upper right bicuspid and upper left second molars were removed because of apical abscesses. Eye-grounds negative.

After prolonged conservative treatment, the patient gave birth to a living, female child, weighing 7 lb., and was discharged with a blood pressure of 190/100.

**Dr. Quigley**, in discussion, classed this case as of the typical, toxic, hypertension type, and stressed the importance of diet control for those obese, pregnant women who show tendency to gain weight rapidly, and thereby increase their hypertension; his rule being to keep such patients from gaining more than 20 lb. during the whole course of pregnancy, as he has found that when they exceed that limit the blood pressure rises in proportion.

**Dr. D'Acerno** outlined his attempts to determine the cause of hypertension in this patient; attention was paid to the old, chronic, otitis media, and several carious teeth were removed, following which she improved for 2 months, but then developed tension higher than before. He referred to his 50 cases of toxemia of pregnancy, reported in the Amer. Jour. Obs. & Gyn., most of those patients having done well on simple rest in the hospital and strict diet.

**Dr. Roberts** agreed with the previous speakers, and further stated that those patients who habitually run a pressure above 140 should be kept on a very strict diet; those who run above 160, should, in addition, be treated medically; when it reaches 180, hospitalization is indicated; and, pressure of 200, means a case that may require interruption of pregnancy. Many of these toxic women are very tender in the epigastrium. In addition to the toxic condition which raises blood pressure, the

possibility of increased thyroid secretion, as another factor, must be considered.

**Dr. D'Acerno.** "Celio-Isthmotomy for Contracted Pelvis." Mrs. E. B., aged 37, gravida iii, admitted to hospital February 27. Last menstrual period on May 30. Married, 3 years; spontaneous delivery of a still-born baby at about 8 months of pregnancy; miscarriage when pregnant 1 month about 2 years ago. Pelvic measurements: B. S., 26; D. C., 26.5; B. Tr., 31; Ext. Conj., 20; C. D., 7.5; C. V., 6. Fundus uteri at the ensiform; fetal head at the inlet; F. H. T., audible in R. Q., 156 per minute and irregular at times. Vaginal examination showed the cervix 5 cm. dilated.

**Diagnosis:** Relatively contracted pelvis (flat). No progress after 36 hours of labor. Membranes ruptured 15 minutes before labor started.

**Operation:** Low segment, transperitoneal cesarean section, by modified Munro-Kerr technic. The principal modifications were the length of incision, equivalent to 14 cm., and a double row of sutures for the vesico-uterine peritoneum, the first being continuous, and the second interrupted mattress sutures. The fetus weighed 6 lb. 9 oz. S.O.B. circumference was 34.4 cm. The membranes were found ruptured and contained a foul-smelling meconium.

The temperature, which was 100° before operation, rose to 101.8° the following day, became normal in 5 days and remained so. There was a stitch abscess at the lower angle of the incision and 2 sutures had to be removed and a rubber drain inserted, but a green, foul-smelling discharge from this portion of the incision, lasted only a few days. No chill, vomiting, or intestinal distention. Lochia normal except for a slightly offensive odor. Incision healed *per primum*. On the fifteenth day after operation, the left leg appeared edematous, especially around the ankle. This cleared up next day and the patient was discharged. A month later her doctor reported that she was entirely recovered.

**Dr. D'Acerno.** "Celio-Isthmotomy for Separate Vagina." Mrs. M. C., aged 20, was admitted July 7. Normal menstrual history. Last regular period, Oct. 6, 1930. Pelvic measurements: B. S., 26; B. C., 28; E. C. D., 20; C. D., ample; B. T. outlet, 7.5 cm.; R. O., 20; L. O., 24. The pelvis was tilted; arch of symphysis narrow; curve of coccyx shallow, and markedly projecting forward. There had been some vaginal bleeding and a few sharp pains in the lower abdomen. Fundus about 4 cm. below the ensiform; fetal head freely movable above the inlet; fetal heart faintly audible in L. L. Q.; more distinctly perceptible with Lee's stethoscope; active fetal movements present.

Vaginal examination elicited a rather narrow canal; cervix completely effaced; spanning from anterior to posterior wall of the vagina was a soft, movable, membranous diaphragm dividing the vaginal canal into 2 distinct chambers—the right, smaller one, ending in the right fornix as a blind pouch, and the left, larger, channel leading to the cervix.

**Diagnosis:** Septate vagina, with congenital vaginal atresia and contracted outlet. Radiograph showed no evidence of fetal abnormality. On July 16 the membranes ruptured spontaneously, and a longitudinal celio-isthmotomy was performed, with delivery of a living, female child, weighing 6 lb. 12 oz.

This case was reported because of anatomic abnormality of the vaginal canal. The septum, which undoubtedly was of congenital origin, represented a lack of fusion of the Müllerian ducts.

Disposition of the septum was favorable, not only for the normal function of menstruation, but it also permitted coitus and impregnation; though it would have caused a severe dystocia had she been allowed to go through labor, and would have endangered the life of both mother and child.

Dr. D'Acerno said he had suggested the term celio-isthmotomy as a fairly accurate expression for an operation which incises the abdominal cavity and the uterine isthmus. Discussing the relation of internal to external measurements, he said that the external measurements being normal does not necessarily imply that the birth canal is sufficiently ample for spontaneous labor. Some good rules to remember are: (1) If a multipara does not dilate after 12 hours, you have *prima facie* evidence of contracted pelvis; consider previous history, and measure the internal conjugate as a check. (2) If the internal conjugate is 9 cm. or just a bit less, the case is "border-line"; give it a test of labor. (3) If the internal conjugate is 7.5 cm. or less, interfere at once.

Dr. Del Vecchio reported a "Case of Cerebral Injury with Interesting Neurologic Signs". J. M., 43, single, Swiss, was admitted as an emergency patient; profoundly unconscious; breathing stertorously; alcoholic breath; showing a large hematoma of the scalp over the left parieto-occipital region, and abrasions of the right leg, cheek and forehead; with history of an automobile accident, in which he was knocked down while crossing the street. Essential findings were: Pupils irregular and sluggish in reaction to light; no oculomotor palsies; some blood on the posterior wall of the pharynx; a right facial paralysis and hyperactivity of the left side of the face; right arm and right leg paralyzed, but the tendon reflexes were hyperactive and there was a positive Babinski on the right side; incontinent to feces and urine; temperature normal; pulse rose from 100 to 136; B. P. 112/78; leukocytosis 25,000; polys., 95%. X-ray picture showed a transverse, linear fracture of the left parietal bone.

The general picture was that of a compression lesion, the result of intracranial hemorrhage, and 6 hours after admission a Cushing decompression operation was done, entering the skull in the left temperoparietal region. There was epidural and subdural hemorrhage; dura was under great tension and, upon opening it, a great quantity of cerebrospinal fluid and blood clots was released. On inspection, there was evidence of injury to the brain cortex, and the middle cerebral vessels were found ruptured and bleeding freely at one point. Hemorrhage was arrested by ligation and a piece of temporal muscle tissue; the wound being closed with rubber dam drainage.

Patient took nourishment on the second day; began to mutter in German by the fourth day; drain removed on the eighth day, and on the tenth day he developed signs of meningitis, as evidenced by drowsiness, temp. 103°, neck rigidity, bilateral Kernig, positive Brudzinski, and increased spinal fluid pressure. Lumbar taps daily for 3 days, and the fluid was xanthochromic, showed a falling cell count—4000 to 146—and slightly increased globulin. Cultures persistently negative. The meningismus was due to irritation of the meninges by the blood, and disappeared about the twentieth day. He now, thirty-fourth day, answers questions well in German but has lost ability to understand English; his friends insisting that he could carry on a conversation in English before the accident. Occasionally gives evidence that he understands some English words; can read some words well,

but has lost their meaning; right hemiplegia has shown very little improvement; right facial paralysis has almost entirely disappeared; and, he is beginning to show movement of fingers and toes. Sensation on the right side is intact.

Dr. Lawling, "Case of Aleukemic Leukemia." Mrs. B., aged 38, white, admitted Aug. 22, complaining of dyspnea and jaundice. Had an emotional upset during menstrual period, 2 weeks before, and a physician put her on ventriculin, iron and arsenic therapy, but she steadily grew worse, and her dyspnea was extreme. There was no colic, diarrhea, tarry or clay-colored stools; no stomatitis. Consultation was held and she was sent to the hospital for transfusion.

Intense yellow color of skin and conjunctiva; no glandular swelling; moist râles at base of both lungs; systolic murmur over precordium; pulse rate rapid; markedly adipose; spleen enormously enlarged, filling left half of the abdomen; liver enlarged 4 finger's breadth below costal margin; no edema. Before admission, a diagnosis of pernicious anemia was made on the blood analysis. However, this diagnosis was ruled out by a consultant, who made the diagnosis of leukemia on the basis of no glossitis, no cord lesions, enlarged spleen.

Laboratory findings: Blood: Hb. 20%; R. B. C., 1,420,000; W. B. C., 34,000; many nucleated reds; marked polychromatophilia and anisocytosis; some poikilocytosis; marked central pallor; many reticulated reds; stippling present; icteric index, 35. Van den Bergh, immediate, direct. August 25, a rare myelocyte was seen.

Patient received 12 transfusions; at first she improved clinically and the hemoglobin and red cell count gained, but the last 5 or 6 transfusions were of no avail. One x-ray treatment of the spleen showed no benefit. The patient finally lapsed into coma and died. Besides the transfusions and radiation, she received intramuscular and intravenous injections of iron and arsenic, Fowler's solution, dilute HCl, liver extract by mouth and intramuscularly, and red bone marrow.

Dr. Riese, "A Case of Nephrosis." A young man, aged 21, walked into the clinic complaining of swelling of the lower extremities and scrotum, and puffiness under the eyes. History of frequent attacks of tonsillitis, for relief of which a tonsillectomy was done. He first noted swelling of the ankles and feet 4 months previously, and at the same time became aware of a weakness and fatigue after the slightest exertion. Swelling of the eyelids has appeared and disappeared, but edema of the lower extremities and scrotum, and enlargement of the abdomen, have increased steadily; while blurring of vision in the left eye has been coming on gradually. An impression of anasarca was immediate; over the chest wall, a pitting edema; also edema in the sacral region, over the flanks, lower extremities and scrotum. Abdomen distended by ascites. Dulness, flatness and diminished breath sounds over both bases. Apex beat displaced slightly to the left. Urinalysis: Sp. gr. varied between 1.007 and 1.035; albumin 7%-27% by volume; reaction sometimes acid, other times alkaline; microscopically, observed an occasional red blood cell, no pus cells, many fine and coarse granular casts. Blood: Hb. 75%; R. B. C., 3,940,000; W. B. C., 12,400; polys., 69%; NPN, 55; creatinin, 1.5; sugar, 90; cholesterol, 199.6 mgm. Basal metabolism —16. The albumin-globulin ratio was not obtainable.

He has, during his stay in the hospital, had



violent headaches and attacks of nausea; vision has improved and eye-grounds are negative; edema slowly but definitely receding. Treatment has been changed frequently; and included at various times high protein diet, thyroid extract, dilute HCl, and various diuretics; has done best on the high protein diet. Weight on admission, 163 lb.; at present, 153.

The diagnosis is not clear-cut. Epstein's nephrosis is negated by findings in the urine and blood; in favor of lipoid nephrosis are the marked edema, tremendous albuminuria and low metabolic rate. No other etiology can be definitely established except the frequent attacks of tonsillitis at an early age, and this latter condition, tend to give a glomerular rather than a tubular condition.

*Dr. Luippold.* "Case of Paratyphoid A." K. H., female, aged 16, English, admitted October 10. Became ill 3 weeks before, with a fever which continued for 2 weeks without other symptoms, subjective or objective; then had a vomiting attack, and everything she swallowed was promptly vomited; a feeling of weakness and a persistent diarrhea followed, and on the night before admission she had a nosebleed. In spite of high fever (103-104°), her mental condition was never worse than mild apathy. A moderate degree of herpes labialis appeared during height of fever. A few crops of atypical rose spots were seen for a few days on the lower part of the chest anteriorly. Spleen never palpable. Slight tenderness over abdomen and flanks during the first week in the hospital; no rigidity. The temperature dropped by lysis.

Blood, on admission: R. B. C., 4,856,000; W. B. C., 8200; polys., 57; Widal, partial agglutination in 1:50, and only very slightly in 1:100; culture for *B. typhosus* was negative. Oct. 20, agglutination response of paratyphoid A to serum was prompt and showed complete agglutination and loss of motility in dilutions of 1:50 and 1:100; whereas with *B. typhosus* and Paratyphoid B. agglutination was only partial in 1:50 and very slight in 1:100. Feces positive for Paratyphoid A. Wassermann negative. November 4, the feces were still positive for Paratyphoid A.

Spuradic cases of paratyphoid crop up every now and then, and the diagnosis is not distinguishable from typhoid clinically; the laboratory, however, definitely makes the diagnosis, and treatment is the same as for typhoid.

### Bayonne Hospital Clinical Conference

Maurice Shapiro, M.D., Reporter

The regular Clinical Conference of Bayonne Hospital was held Monday evening, November 2, at 9 p. m., with Dr. Donohoe as Chairman and Dr. Shapiro as Secretary.

*Dr. Fifer* reported for Dr. Sexsmith the following surgical cases:

*Case 1.* G. S., female, aged 44, entered October 7, stating that for the previous 4 weeks she had abdominal pain, more marked in the right hypochondriac region. Operation 7 years ago in Scotland, for some pelvic condition. Herniotomy 6 years ago; has 11 living children. Examination showed: Heart: Short systolic murmur over apex; diffuse abdominal tenderness on pressure; urine negative except for 3+ albumin; radiogram suggested the presence of functional disturbance and pylorospasm, probably due to a reflex irri-

tation from chronic inflammatory process in the gall-bladder.

Patient was kept under observation, and 7 days after admission all symptoms had subsided. Nevertheless, an exploratory operation was performed October 25. The gross findings were negative except for plenty of postoperative adhesions, which were broken up, the uterus was suspended, and the abdomen closed.

*Case 2.* T. B., male, aged 43, entered October 12, with extremely sharp abdominal pain. Duration of illness 4 days. For 3 consecutive days he had taken large doses of castor oil; which was followed by a profuse diarrhea. Doctor X gave him 2 hypodermics, but with temporary relief only. Examination showed a distended abdomen which on percussion appeared to be rather flat, but there was diffuse tenderness. Distension diminished when the diarrhea was checked, and the patient steadily improved and made an uneventful recovery; discharged on October 27, in good condition.

*Case 3.* E. H., female, aged 2, entered with uniform swelling and tenderness of the whole right arm; onset sudden, 3 days before, with inability to move arm. One year ago patient fell 2 flights of stairs and bumped right arm. However, she never experienced any pain, nor made any complaints. Patient has always been in good health otherwise until present illness. Motion of arm attended by excruciating pain. No evidence of open sore or abrasion. Temperature on admission 102°, but next day it went up to 104.4°. Diagnostic aspiration obtained no pus. Another aspiration about the deltoid region yielded purulent material. Consequently, a large incision was made over the deltoid region and a good bit of pus evacuated; bone was found to be rough, evidently involved in the infection. From then on, temperature was almost continuously 104°, until the sixth day when it got up to 105.8°, and the child showed signs of developing pneumonia. At present she appears very toxic but the general condition is hopeful.

### HUNTERDON COUNTY

Barclay S. Fuhrmann, M.D., Secretary

The Hunterdon Component Medical Society held its Annual Meeting in Flemington, October 27.

In lieu of our usual morning meeting, a dinner was served at 8.30 p. m., during course of which the usual business, as well as the election of officers, was carried on, leaving the time after dinner for the scientific program. This arrangement seemed to meet with the hearty approval of the members present and some were very enthusiastic in their commendation of the plan.

The election of officers was as follows: President, I. T. Topkins, Califon; First Vice-President, W. E. McGorkle, Ringoes; Second Vice-President, F. A. Thomas, Flemington; Treasurer, E. W. Closson, Lambertville; Secretary and Reporter, B. S. Fuhrmann, Flemington; Delegate to State Society, A. H. Coleman, Clinton; Alternate, A. L. Gramsch, Glen Gardner; Member of Nominating Committee for State Society, S. B. English, Glen Gardner; Alternate, A. H. Coleman, Clinton.

At the conclusion of the dinner, we had the great privilege of listening to Dr. A. C. Morgan,

of Philadelphia, who presented a very entertaining and highly instructive paper entitled, "Tragedies of the Chest", Dr. Morgan naming them as: angina pectoris, acute coronary occlusion, and acute cardiac dilatation. In a very charming and simple manner, Dr. Morgan gave word pictures of the 3 conditions, as they would be met by the physician, and described them in such way that, I believe, none of those present will ever be at a loss to decide which of the 3 is the cause of his patient's suffering.

After giving a brief outline of the treatment for the 3 diseases mentioned, a very interesting discussion ensued and many interesting phases of the subject were brought out.

The following members and visitors were present: Members—Drs. William E. McCorkle, F. A. Thomas, F. G. Clark, I. R. Boothby, B. S. Fuhrmann, G. B. Tompkins, J. L. Chamberlin, I. T. Topkins, A. A. Heil, S. B. English, E. W. Closson, T. B. Fulper, A. L. Gramsch, Francis Apgar, B. M. Harmon, L. T. Salmon, A. H. Coleman, L. C. Williams. Visitors—Drs. A. C. Morgan, F. G. Scammell, T. H. McDonough, G. N. J. Sommer and H. A. North.

#### MERCER COUNTY

A. Dunbar Hutchinson M.D., Secretary

The Mercer County Medical Society held its Annual Banquet at the Trenton Country Club on November 12, with about 60 members and guests present.

Mr. Frank D. Schroth, a Trenton man connected with the local newspaper, and a writer of considerable ability, addressed the gathering upon the subject, "Impressions of Russia", giving an interesting account of his recent visit to Moscow, with recital of many pleasing and some disagreeable experiences while traveling in that part of the world.

Following the banquet, a short business meeting was held for the purpose of receiving applications for membership, several of which were read and referred to the Committee.

The Woman's Auxiliary, meeting in the same building, adjourned following its business meeting, and was also entertained by Mr. Schroth's address.

The next meeting will be held on December 9, and annual election of officers will be held.

#### MIDDLESEX COUNTY

S. Gordon Berkow, M.D., Reporter

The November meeting was held at Middlesex General Hospital, in New Brunswick, on the seventeenth at 9 p. m., Dr. William H. McCormick, Jr., presiding.

Dr. Frank C. Henry, Jr., presented 3 cases of "Pedicel Skin Grafts". (1) A man shot through the hand while hunting; (2) a woman whose right hand was caught in a mangle; (3) 5 year old girl burned in a gasoline explosion, as a result of which she suffered arm-chest adhesions. The patients were exhibited and the procedure explained by which he obtained excellent functional and cosmetic results.

The paper of the evening was "Seminal Vesicles as a Focus of Infection", by Dr. J. S. Ritter, Assistant Professor of Urology, Post-Graduate Hospital, New York City.

Dr. S. E. Kramer, of Perth Amboy, opened the discussion and exhibited slides showing his pathologic study of the seminal vesicles on cadaver material.

Dr. Stillwell, of Milltown, was elected to membership.

#### MORRIS COUNTY

Marcus A. Curry, M.D., Reporter

A special meeting of the Morris County Medical Society was held on November 19, in the New Jersey State Hospital, Greystone Park. This was the first meeting over which Dr. Krauss had presided since his election to the presidency in September, and the attendance of about 50 members and guests, and the interest manifested, must have been pleasing to him as it was to everybody else present.

The subject of the evening was "Newer Methods of Treatment of Pneumonia", with special stress laid on the value of serum therapy, by Dr. Horace S. Baldwin, of New York, who has been working with pneumonia serums in New York hospitals for a number of years. Dr. Baldwin pointed out the several types of pneumonia and the classification etiologically; that Type I pneumonia appears in about 25% or 30% of all pneumococcus pneumonias; Type II in about 25%; Type III in about 15%; Type IV making up the balance; that the mortality rate differs with this germ type; that in the management of pneumonia it is of first importance to determine the type. First get a specimen of the sputum, and in 24 hours you may know what type you have to deal with; and in types 1 or 2 you can have the specific means of therapy. It is also important, however, to get the blood culture, and if the blood culture is positive the patient is in for a hard time and the prognosis is grave.

The subject was accorded interesting discussion by Drs. Christian, Haven, Lathrope, Seward, Young, Melvin, Eckhardt and Krauss.

#### OCEAN COUNTY

Eugene G. Herbener, M.D., Reporter

The annual meeting of the Ocean County Medical Society was held Friday, November 13, in the Grill Room of the Forked River House, Forked River, New Jersey. A shore dinner was served to the physicians and their guests, and was enjoyed by all.

The President, Adolph Towbin, called the meeting to order, and the minutes of the previous meeting were read and approved. After a general discussion of matters pertaining to the collection of fees the President made an address of welcome to the new members and guests.

Dr. Edgar Ill gave an interesting talk on Child Welfare Clinics conducted in the public schools of Newark. He also gave many helpful suggestions on how to make our society a mutual benefit to all.

Dr. Frank Denniston gave an interesting talk



on Reduction and Retention of Compound Fractures of the Tibia, with a number of x-ray illustrations.

Dr. Riggs, of the Naval Air Station at Lakehurst, was elected an honorary member of our society.

Dr. Emmanuel Sickel, of Lakewood, was also elected to membership, and Dr. Ralph Jones, of Toms River, was made an honorary member.

Election of officers for the ensuing year resulted as follows: President, Blackwell Sawyer, of Toms River; Vice-President, Abraham Goldstein of Lakewood; Treasurer, Frank Brouwer, of Toms River; Secretary, Alfred Woodhouse of Toms River; Reporter, E. G. Herbener, of Lakewood.

Several of our guests and new members favored us with short talks. The newly elected President made a short address and stated that the Society would have *quarterly meetings* during the coming year.

A vote of thanks was given the arrangements committee, Drs. Towbin and Woodhouse, who spared no efforts in making this one of the most successful meetings in a long time.

### PASSAIC COUNTY

Wayne W. Hall, M.D., Secretary

The regular monthly meeting of the Passaic County Medical Society was held at Valley View Sanatorium, Paterson, Thursday, November 12. The meeting was called to order by the President, Dr. John Carlisle. The minutes of the October meeting were approved as read.

At the request of the Woman's Auxiliary, an Advisory Committee, consisting of Drs. J. P. Morrill, Chairman, G. E. Tuers, and William Spickers, was appointed by the President.

Dr. Carlisle also appointed a Maternity Welfare Committee, consisting of Drs. William Dwyer, Chairman, H. H. Nye, A. Schulman, and R. N. MacGuffie.

Dr. Jeremiah H. O'Brien was elected to membership, but at the suggestion of Dr. Charles Mitchell, the membership will become effective January 1, 1932, so that dues for this year will be omitted.

The Scientific Program was as follows:

The "Differential Diagnosis of Pulmonary Tuberculosis", by Dr. J. Burns Amberson, Director of the Tuberculosis Department of Bellevue Hospital, New York City.

"Childhood Types of Tuberculosis", by Dr. William Weintraub, of the Sanatorium Staff.

These papers were discussed by Drs. O. R. Hagen, F. H. Todd and Charles Murn.

Mr. Wood, President of Valley View Sanatorium, was present and spoke of the work of that Institution.

There were 81 members present. Adjournment followed a collation.

### SUSSEX COUNTY

F. H. Morrison, M.D., Reporter

The autumn meeting of the Sussex County Medical Society was held November 18, at the home of Dr. Fred H. Morrison, in Newton, at 7.30 p. m., with President Roy in the chair. The guests included Dr. Samuel Gant, of New York City, and several of the wives of members. The

minutes of the previous meeting were read and approved.

New members admitted to the society, after approval by the Board of Censors, were Drs. Spencer, of Newton; and Taylor, of Franklin.

Dr. Gant gave a very interesting talk on the "Treatment of Rectal Diseases" and there followed an active discussion in which most of the members took part.

The President expressed the thanks of the society to Dr. Gant for his excellent exposition of the subject.

Several reels of motion pictures were shown, of medical and surgical subjects, presented through the courtesy of the Petrolagar Company.

The following officers were elected for the ensuing year: President, Martin Quirk; Vice-President, L. B. Drake; Secretary, F. P. Wilbur; Reporter, Fred Morrison; Treasurer, T. R. Pooley; Censor, J. G. Coleman; Delegate to State Society, F. P. Wilbur; Nominating Committee of State Society, F. P. Wilbur, and Alternate, F. H. Morrison.

Dr. Gant entertained the members and guests with a series of his clever tricks, and refreshments were then served.

The next meeting will be held in January, at Dr. Smith's home.

### UNION COUNTY

#### Westfield Medical Society

Frederick A. Kinch, M.D., Reporter

The November meeting of this Society was held on November 10, at the home of Dr. Charles T. Decker. President Lowell presided over a very full attendance of the members.

Routine business was transacted, after which Dr. Lindley H. Leggett, Jr., read a very interesting paper on "Celiac Disease", with report of a case.

At the close of the business meeting, a social hour was enjoyed through the hospitality of Dr. and Mrs. Decker.

A fitting ending to an enjoyable evening was a vote of appreciation to Dr. and Mrs. Decker for their entertainment.

### WARREN COUNTY

Charles B. Smith, M.D., Secretary

The autumn meeting of the Warren County Medical Society was held at Hotel Belvidere, Belvidere, Tuesday, October 20. The following members and guests were present: Allen, Curtis, Cummins, Hackett, Bossard, LaRiev, Lyons, Smith, Tunison, Zuck, Dr. Baldauf, of Belvidere, and Dr. Wing, of Blairstown.

The Censors reported favorably on the application of Dr. Herman Baldauf and he was unanimously elected a member of the society. The application of Dr. Raymond Wing, to have his membership transferred from Mercer to Warren County, was unanimously accepted. Certificate of Membership was received from the Secretary of the Mercer County Medical Society.

The Treasurer's account, after having been audited by Drs. Curtis, Allen and Baldauf, shows a balance of \$83.66.

A paper on "Infantile Paralysis" was read by Dr. L. W. Hackett, of Washington, who gave all the recent developments in knowledge of this

disease; and it was discussed by all the members present.

Drs. Zuck and Smith, who were appointed at the spring meeting to draft resolutions on the death of Dr. L. C. Osmun, submitted the following, which was unanimously adopted:

Resolutions adopted by the Warren County Medical Society,

It is, truly, with regret that we announce and record upon our minutes the death of Dr. Louis Cook Osmun.

It pleased the Omnipotent to call from our midst, on March 30, 1931, Dr. Osmun, a member of this society for 40 years.

He was born in Mendham township, in the year 1865, the only son of the late Edward and Ruth Menagh Osmun. He graduated in 1891 from the College of Physicians and Surgeons of New York City, and followed his profession in Hackettstown until his death, with the exception of 3 years in Newark.

He was a Director of the Dover General Hospital and a member of its visiting staff. It was there he died, after a short illness, of multiple abscesses of the spleen.

He was a member of the Dover Lodge of Elks, Monitor Council, Jr. O. U. A. M., the Methodist Episcopal Church and a charter member of the Hackettstown Club. At the time of his death he was Secretary of the Warren County Medical Society and a Trustee of the New Jersey State Medical Society.

The Warren County Medical Society has lost an old and conscientious member, and the community, a dependable physician and upright Christian citizen.

We lament his death and share the loss with his family.

"So live that when thy summons comes to join  
The innumerable caravan, which moves  
To that mysterious realm, where each shall take  
His chamber in the silent halls of death.  
Thou go not, like the quarry-slave at night,  
Scourged to his dungeon, but, sustained and  
soothed

By an unfaltering trust, approach thy grave  
Like one who wraps the drapery of his couch  
About him, and lies down to pleasant dreams."

Be it Resolved, therefore, that a copy of these minutes be sent to the bereaved family, expressing our sympathy and affection for our departed member.

Arthur C. Zuck,  
Chas. B. Smith,  
Committee on Resolutions.

The following officers were elected for the year 1932: President, A. C. Zuck; Vice-President, G. O. Tunison; Secretary, L. W. Hackett; Treasurer, G. W. Cummins; Reporter, C. B. Smith; Censor, C. H. Lyon; Delegate (3 years), George W. Cummins. Members Nominating Committee State Society, G. W. Cummins; Alternate, Herman Baldauf,

New Jersey, for a short time, and later established an office in Trenton, where he practiced until the very day of his death. Together with his wife, Dr. Beatty traveled extensively and had visited nearly every country in the world.

LAMSON, William J., formerly residing at 120 Summit Avenue, Summit, New Jersey, died in Overlook Hospital on Saturday, November 28, 1931, after a brief illness and a surgical operation performed 3 days previously.

Dr. Lamson was born in Orange 60 years ago and had practiced medicine in this city for 30 years. After graduating from Yale, where he was admitted to the Phi Beta Kappa Society, he obtained his medical degree from the College of Physicians and Surgeons in New York. Later, he was connected with St. Luke's Hospital in New York. For a while he served on the Union County Mosquito Extermination Commission. To the public he was very well known because of his service as Medical Supervisor of the Summit Public Schools, and to the medical profession he was most favorably known as for long time Secretary of the Summit Medical Society.

He is survived by a brother, Edwin, and a sister, Mrs. George C. Musgrave, of Wimbledon, England.

MERCER, Archibald, in his 83rd year, died at his home, 31 Washington street, Newark, on November 3, 1931.

Dr. Mercer was a son of the late Dr. William Theodore Mercer and Gertrude Ann Frelinghuysen Mercer. Through his mother he was a descendant of Frederick Frelinghuysen, a Revolutionary General. He studied at Newark Academy and was a graduate of Rutgers College in 1868, and the College of Physicians and Surgeons, in New York, in 1871, since when he had practiced in Newark.

In 1888 he married Miss Katrina Campbell. She died in 1929.

Dr. Mercer served as House Physician and Medical Superintendent of St. Barnabas Hospital, Newark, from 1871 to 1921; Police Surgeon, Federal Examining Surgeon on Pensions and Surgeon to the New Jersey Home for Disabled Soldiers. Since 1904 he had been Assistant Medical Director of the Mutual Benefit Life Insurance Company, of New Jersey.

He had been Trustee of the Newark Public Library, and Newark Museum Association, Secretary from 1878 to 1906, and President in 1906 of the Essex County Medical Society; Treasurer for 30 years, and in 1922 President, of the New Jersey State Medical Society, and President of the Medical and Surgical Society of Newark. He was a member of the Sons of the American Revolution and a life member of the New Jersey Historical Society.

SIMPSON, Maxwell S., formerly U. S. Army Surgeon, resident of Titusville, died in the Mercer Hospital, November 12, at the age of 78 years. Dr. Simpson was born in Dayton, Ohio, in 1853; received his general schooling in that state; studied pharmacy and medicine in Philadelphia; saw active service at different times with both the army and the navy; and had recently completed his half century of life as a physician.

## Obituaries

BEATTY, Henry Moore, of No. 50 Centre street, Trenton, died on November 13, in the 74th year of his life. Born in Lambertville, Hunterdon County, 73 years ago, he graduated from Jefferson Medical College in 1882, and located at Florence,



## OFFICIAL TRANSACTIONS

### 165th Annual Meeting of the Medical Society of New Jersey

Held at the Hotel Berkeley-Carteret, Asbury Park, June 3, 4, 5, 1931

#### HOUSE OF DELEGATES

*Wednesday Morning Session*

June 3, 1931

The opening session of the House of Delegates of the One Hundred and Sixty-Fifth Annual Meeting of the Medical Society of New Jersey, held at the Berkeley-Carteret Hotel, Asbury Park, New Jersey, convened at 10.45 a. m., June 3, 1931, with Dr. George N. J. Sommer, President, in the chair.

*President Sommer:* The meeting will please come to order.

In opening this, the One Hundred and Sixty-Fifth Annual Meeting of the State Medical Society of New Jersey, I am sensible of the great honor conferred upon me as your presiding officer for this year. I have prepared an abstract of my presidential address and the reading of it will explain why I am presenting such an abstract at this time.

#### Abstract of Address, for Use in the House of Delegates

It is in some ways unfortunate that our Constitution and By-Laws provide for delivery of the Presidential Address at a fixed time which is not reached until after the House of Delegates has completed its business. At the end of a year of activity the President should have some recommendations to offer, and it happens this year that as the result of experience and observation I shall in my address suggest that certain problems be considered and, possibly, acted upon. It seems necessary, therefore, to mention now some of the topics included in my address to be delivered on Friday, and to ask you to receive in advance some of my recommendations. For instance, I am reporting that nearly every county society in the state has at some meeting during the past year discussed unsatisfactory features of the Workman's Compensation Law, and I have advised that a special committee be appointed to study all phases of that problem. Likewise, the questions of contract practice and of industrial medicine seem to call for appointment of a special committee of investigation, and I have so recommended.

Attention is also called to a resolution adopted at the Annual Conference of County Society Secretaries and Reporters, asking the society to appoint a commission to study the national health insurance laws—so-called state medicine—of other countries, and consider the trend toward

such legislation in some of our states. That would seem a wise course to follow.

It has also been reported that at one of the Councilor District Meetings a plan for classification and regulation of specialists was discussed and a resolution adopted requesting the state society to consider that question. Again, I think it would be wise to investigate efforts at control of specialism being made in other states. It seems to me the public has a right to challenge some of the acts of some specialists, and that the obligation rests on us to establish standards of qualifications for special practice and to make available to the public a list of approved specialists. Of our own accord we regulated our medical schools and set up the requirements for entry into the practice of general medicine. It may be wise, even if not absolutely necessary, now to determine standards for specialism and give our stamp of approval only to those who can fulfill our requirements. It will be much wiser to do that than to permit legislators to attempt regulation by law.

In my address I shall also recommend co-operation with the State Board of Health and the State Hospital Association in efforts to revise the health laws; and recommend appointment of a special committee to urge upon the Commissioner of Motor Vehicles adoption and enforcement of the plan proposed by Dr. Reik for physical examination of all applicants for license to drive an automobile. The fact that automobiles are killing annually more of our citizens than did the World War is certainly a disgrace to civilization, and anything we can do toward reducing that death toll must be done.

Finally, I shall ask for the naming of a special committee to guide the destinies of the Woman's Auxiliary, to set one or more tasks for definite action by the county auxiliaries, and to supervise their work throughout the year.

*President Sommer:* Does anyone wish to say anything about these recommendations at this time? If not, we shall go on to the regular business, and ask for the report of the Committee on Credentials. Dr. William J. Carrington, Chairman. Is Dr. Carrington here?

Dr. Carrington was not present.

*President Sommer:* I will now call for the reading of the minutes of the 1930 meeting.

*Secretary Morrison:* Inasmuch as the minutes of the 1930 meeting were published in the Journal, I move that such publication be taken as the official reading.

The motion was seconded and carried.

*President Sommer:* The report of the Committee on Arrangements and Program, Dr. M. W. Reddan, Chairman.

Dr. Reddan was not present.

*President Sommer:* The report of the Committee on Scientific Work, Dr. Lancelot Ely, Chairman.

*Dr. Ely* presented his prepared report, as follows:

#### Report of Committee on Scientific Work

The Committee on Scientific Work met in conjunction with the Committee of Arrangements and Program during the winter, and drafted an outline of the program. Conference and correspondence have resulted in the Scientific Program as printed, and as it will be presented before this convention.

You will note that a large number of speakers are from the state of New Jersey. This was the purpose of the committee for this year, and we have tried to have all sections of the state represented.

The committee takes this opportunity to express appreciation of the courtesy and coöperation of all who have been approached, and especially Drs. Sommer, Morrison and Reik.

Respectfully submitted,

Lancelot Ely, Chairman.

*President Sommer:* You have heard the report of the Committee on Scientific Work. What is your pleasure?

*Member:* I move its adoption.

The motion was seconded and carried.

*President Sommer:* We will have next the report of the Committee on Publication, Dr. H. C. Barkhorn, Chairman.

#### Report of Publication Committee

The Publication Committee wishes to acknowledge its indebtedness to the officers of the state society for their helpfulness throughout the past year. This is particularly true of Drs. Marsh and Morrison. Dr. Marsh was especially kind in sending necessary information in such a tactful manner that it seemed as though he were just checking up his own records.

The Journal has had a good year, both financially and as a medium for transmitting information to the membership. The committee has made careful observations on the needs of the society, has considered changes in the Journal both as to number of pages and contents thereof, and after due consideration feels that, while there might have been constructive criticism of some individual articles, there is no department which could be radically changed without great loss to some groups of our members. A Journal which is to satisfy the wants of both urban and rural doctors must be about as our Journal is.

The mailing list has been fully revised and is now absolutely correct. In order to keep it so, we recommend that a hand addressograph be purchased. This will cost, with necessary attachments, plates and stamp fillers, about \$319, but it will pay for itself in a few years by the

decreased expense in revising the list and mailing the Journal.

We suggest that \$15,000 be the amount of our budget for the next fiscal year.

It has been a pleasure to work with the Editor, Dr. Reik. He has been eager to coöperate, both in scientific and business matters, and has helped tremendously to make things go smoothly.

#### Financial Report

June 1, 1930 to June 1, 1931

##### RECEIPTS

Balance on hand June 1, 1930	\$ 509.91
Advertising (including A.M.)	
A. rebate of \$428.42)	11,323.40
Extra subscriptions	63.15
Sale of Journal	14.97
Bills receivable	1,003.41
Cash on hand June 1, 1931	226.64
Total	\$13,141.48

##### EXPENDITURES

Commissions paid (Coöperative)	\$ 1,237.74
Commissions O.K'd for local canvassers	280.75
Discounts paid	252.35
Chairman's salary	500.00
Chairman's expense	120.00
Printing and mailing of Journal	13,436.33
Reprints	270.22
Index	141.00
Total	\$16,238.39

#### COMPARATIVE STATEMENT

	1929-30	1930-31
Advertising receipts	\$11,035.78	\$11,323.40
Subscriptions (extra)	42.15	63.15
Sale of Journal	9.97	14.97
Printing and Mailing of Journal	12,868.45	13,436.33
Reprints	171.00	270.22
Commissions	1,265.74	1,237.74
Discounts	234.23	252.35

#### SUMMARY

Amount of advertising secured by Coöperative	\$4,854.42
Amount of advertising secured locally	4,549.47
Amount of discount and commission allowed Coöperative	1,176.80
Amount of discount allowed local advertisers	48.88
Amount of commission O.K'd local canvassers	280.75
Amount of commission paid local canvassers	264.41
Total amount of advertising (net)	9,403.89
Total cash receipts, all sources	9,114.87
Total amount paid Treasurer	8,850.46

#### Receipts and Net Expenses for the Year

##### RECEIPTS

Cash on hand May 31, 1931	\$ 226.64
Total receipts	9,114.87
Bills receivable	1,003.41
	\$10,344.92



## EXPENSES

Printing and Mailing of Journal	\$13,436.33
Commission C.K'd for local canvassers	280.75
Chairman's salary	500.00
Chairman's expenses	120.00
Reprints	270.22
Index	141.00
	<hr/>
	\$14,748.30

Respectfully submitted,

Henry C. Barkhorn, Chairman  
Edward J. Ill  
Linn Emerson

*President Sommer:* You have heard the reading of Dr. Barkhorn's report, what is your pleasure?

*Member:* I move its adoption.

The motion was seconded and carried.

*President Sommer:* We shall now hear Dr. Reddan's report for the Committee on Arrangements and Program.

*Dr. M. W. Reddan:* This is just a little preliminary statement, more of an announcement than a report.

The Committee on Program and Arrangements announces the following program of social activities for this meeting. Golf—today—Wednesday—all day—at Asbury Park Golf Club. Beautiful prizes for Low Gross, Low Net, Kicker's handicap, etc. Drs. Clayton and Fisher in charge.

Bridge tea for ladies, at the Golf Club today at 2.30 p. m. "Dutch Treat" Supper Dance, at Vivian Johnson's, Monmouth Beach, tonight at 10 p. m.—come when you will—leave when you desire. A cover charge of \$1 has been arranged, and a good time is promised all.

Thursday, June 4—For the ladies—a boat trip down the Shrewsbury River to Lower New York Bay, stopping at Fort Hancock for luncheon. Bridge on board for those who want to play. We have arranged this trip, at considerable expense, for the ladies and hope all of them will go.

Thursday night, June 4, at 8 p. m., a Dinner Dance at the Berkeley-Carteret Hotel, in the Crystal Room. This should be the *gala* event of the meeting, as a wonderful dance orchestra and good entertainment have been provided, and valuable prizes will be given. I would like to interpolate right here that there has been some objection, on the part of some people, to paying \$4 for this dinner. They say: "Why should we? We can get the regular hotel dinner for \$2; why should we pay \$4?" Well, we are going to have a little entertainment, and music, and we are trying to make it an attractive event; so, naturally, there will be some extra expense incurred.

We do not feel the Medical Society should feed the members, so we are charging \$4 per person for this dinner dance, which is exactly what the hotel is charging us for the fine menu they will serve. All other expenses, totalling over \$250, will be paid for by our committee. This seems the logical evening entertainment and we urge everyone to attend. In addition to the various dance prizes—the Golf prizes will be distributed during the evening. Finally, a very delightful Hostess Entertainer will be in charge.

For Friday—Golf—all day—for those who wish to play.

In spite of business depression and our conflicting with 4 other medical meetings nearby, we will be able from our receipts to pay all the expenses of the convention.

*Dr. Stahl:* If this is the proper place, I would like to ask the Program Committee what day the Nominating Committee is to meet?

*President Sommer:* I think we have some sort of a ruling on that and I am going to ask Dr. Morrison to read it.

*Secretary Morrison:* Mr. President, there has been for 2 years some discussion as to what constitutes the "first day" of the meeting of this society. The interpretation of the Charter is that the House of Delegates is *per se* the Medical Society of New Jersey. But, the Medical Society of New Jersey, in the opinion of some of us, has a broader meaning and the House of Delegates is really a Committee of the Medical Society of New Jersey and it may meet concurrent with, before or after, the meetings of the Medical Society of New Jersey. Other members of our Committee on Constitution and By-Laws, and of the society, take exception to that view, and last year the House of Delegates referred this question again to the Committee on Constitution and By-Laws for an opinion. The Chairman of that Committee did not call the Committee together to consider this question; so, the Committee on Program and Arrangements published the program as has been usual, with Thursday as the first day of this meeting and for the meeting of the Nominating Committee, and with the election of officers scheduled for Friday. Perhaps that is not in accord with the Constitution and By-Laws, but no different interpretation has been given to you as yet.

*President Sommer:* You have heard the report of the Committee on Arrangements and Program. What is your pleasure?

*Dr. Marcus W. Newcomb:* When are we going to get a report from that Constitution Committee? Are we going to have the same thing again next year? I think we ought to decide right here.

*President Sommer:* I would like to get this Committee's program accepted first and then we can take that matter under consideration.

*Member:* I move we receive the report of the Committee on Program and Arrangements.

The motion was seconded and carried.

*President Sommer:* Now, Dr. Quigley, will you answer that question?

*Dr. Quigley:* The question of when the Nominating Committee meets was referred last year to the Committee on Constitution

and By-Laws, but that Committee had ceased to exist and was only recently in part revived as a reference committee, which may be created as a special committee to continue throughout the year, but that was not done last year.

The wording of this Section of the By-Laws is very plain. It is not open, in my opinion, to any misinterpretation. It definitely states that the Nominating Committee shall meet on the first day of the annual meeting, which is today, and that the Nominating Committee shall make its report as the first order of business on the afternoon of the second day, which is tomorrow, and the point that I wish to make is that regardless of whether it is a wise thing to have it on the first or the second day, the By-Laws distinctly say it shall be on the first day; and the Committee on Constitution and By-Laws, in making the Nominating Committee meet on the first day, made no change in that respect from the previous By-Laws. The previous By-Laws also had the Nominating Committee meet on the first day and so, if my opinion is asked, I don't think there is any reason for any other interpretation. It distinctly states that the Nominating Committee shall meet on the first day, which is today.

*Dr. Stahl:* Mr. President, I will make a motion that we consider this the first day and that the Nominating Committee shall meet today.

The motion was seconded and carried.

*Dr. Quigley:* May I supplement what I said by adding that according to the By-Laws the Nominating Committee should report tomorrow afternoon at the usual hour when the election of officers shall be held.

*President Sommer:* It shall be so understood. The Chair will rule that, upon that understanding, the Committee shall report tomorrow afternoon.

We will now hear the report of the Recording Secretary.

*Secretary Morrison:* Before I read my report, I would like to announce that the Members of the Nominating Committee must hand in their credentials, given to each of them by the County Society, authorizing them to represent their County Society on the Nominating Committee.

I find that my report is up in my room. The President suggests that I read some correspondence which it is necessary to present to you. We have letters from 3 or 4 medical societies and medical organizations in the South asking that we instruct our Delegates to vote that the next American Medical Association meeting shall be held in their city. Personally, I think it is a bad precedent. The

American Medical Association has met in New Jersey many times and the New Jersey State Medical Society has never sought pre-convention pledges of Delegates from other state societies. It is simply another cog in the wheel of politics in the American Medical Association, and I think we would be wise to keep our fingers off it. That is, however, just a personal opinion.

*President Sommer:* You have heard this announcement. I might say in reference to those letters that I, too, have been deluged by letters from New Orleans and Memphis.

*Dr. F. W. Pinneo:* It seems to me that Dr. Morrison made a very good point, that it is hardly wise for a State Society to instruct delegates on this matter. I think a proper motion is that we leave our delegates uninstructed, and I so move.

The motion was seconded and carried.

*Secretary Morrison:* This next letter is from the Secretary and General Manager of the American Medical Association.

Feb. 11, 1931.

Dear Doctor Morrison:

For several years there has been a more or less insistent demand that changes be made in the section of the Principles of Medical Ethics dealing with patents and perquisites, which now reads: "Sec. 5. It is unprofessional to receive remuneration from patents for surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances, or perquisites from attendants who aid in the care of patients."

The matter has been under consideration by the Judicial Council at various times during the past 3 or 4 years. At a meeting of the Judicial Council, recently held, I was instructed, as its secretary, to communicate with a number of representative physicians to ask that they be good enough to submit their views as to whether this particular section of the Principles of Medical Ethics should be amended so as to make it ethical for physicians to obtain patents on instruments, appliances, methods of production of therapeutic products, and on therapeutic agents used in the treatment of disease.

I am very sure that the members of the Council will be grateful indeed to you if you will submit a statement of your opinion in this matter, and if, at the same time, you will offer specific suggestions as to the nature of such changes as you think may properly be made in the section of the Principles of Medical Ethics dealing with patents and perquisites.

Two suggestions have already been before the Council for consideration. One is, that Section 5, Article I, Chapter II, of the Principles of Medical Ethics be changed to read: "It is permissible for physicians to obtain patents on instruments and appliances useful in medicine and to exercise their privileges thereunder, provided that the economic arrangement as to manufacture and sale meets with the approval of the Board of Trustees of the American Medical Association." The second suggestion is to the effect that the section be amended so as to read: "It is unprofessional to accept rebates on prescriptions or surgical appliances or perquisites from attendants who aid in the care of patients."



However, the public welfare demands the encouragement of inventive genius that is entitled to a reward in keeping with natural laws, which is not unprofessional when devoid of exploitation."

Very truly yours,  
Olin West.

*Secretary Morrison:* I wrote to Dr. West as follows:

February 14, 1931  
Dr. Olin West, Sec.,  
American Medical Association,  
Chicago, Ill.

Dear Dr. West:

Replying to your letter of February 11, in regard to proposed changes in the Principles of Medical Ethics, let me say that it is my personal feeling and, I believe, the vast majority of the members of the Medical Society of New Jersey would vote against permitting a physician, under our code, to receive a patent right on any instrument, appliance or remedy when such articles are to be used in the alleviation of human suffering.

Such action, were we to endorse it, would only add to the commercialism now rampant in our ranks and further submit us to adverse criticism on the part of the laity. Why commercialize pain, disease, or their remedies? Our position differs from that of the manufacturer who invents a time or labor saving device. We cannot apply that principle to the alleviation of human suffering. Our past history is illuminated with the names of heroes who have spent years of toil and the better part of their substance in endeavoring to alleviate human suffering, and no glory would now be attached to their names had they wrung from the sufferers an exorbitant royalty or even a pittance in return for their discoveries.

Would the Panama Canal have been constructed when it was had the cure of yellow fever been patented and cost millions of dollars? Would the control of diphtheria, now at the disposal of every municipal laboratory in the world, be in effect if the cure and prevention of that dread disease had been patented? Would it be in keeping with our high office to compel a physician to pay a fellow physician a royalty for some instrument or remedy?

The Great Physician could have been the richest man in the world's history had he sold the remedy for salvation.

We would approve of keeping in the code the section which provides that—"It is unprofessional to accept rebates on prescriptions or surgical instruments."

Sincerely yours,  
J. B. Morrison, M.D.,  
Secretary.

*President Sommer:* It seems to me that Dr. Morrison's stand and his letter require our approval. Will someone make a motion to that effect?

*Dr. John F. Hagerty:* I move that this society go on record as opposing the changes suggested and approving Dr. Morrison's letter to the American Medical Association. I have seen stated from time to time the

amount of money Banting might have made if he had so patented the use of insulin for diabetes; the figures were enormous, running into million of dollars. That he did not capitalize his discovery is one of the finest things in modern medical history.

The motion was seconded.

*President Sommer:* You have heard the motion, that we disapprove of the patenting by medical men of inventions for the cure of sickness and disease, and we approve the action taken by Dr. Morrison.

The question was put and the motion carried.

*Secretary Morrison:* I have a communication from the Association for the Protection of Constitutional Rights, which reads:

New York, April 6, 1931

Dear Doctor:

The enclosed resolution and statement are sponsored by the Association for the Protection of Constitutional Rights. The form of the resolution is that presented to the Medical Society of the County of New York. (It has been approved by the officers and will be acted upon at the next meeting). A similar resolution was passed, as you probably know, by the American College of Physicians. The Councils of the New York Academy of Medicine and the Philadelphia College of Physicians have recommended the adoption of such resolutions by their respective bodies.

Now is the time for the medical profession to remove the menace of lay legislation which insults and hampers the profession in its work.

If you approve of the plan and the import of the resolution, will you not undertake to present it to your state and local medical organizations? It would be a splendid thing if we could induce the House of Delegates of the A. M. A. to adopt it.

Very truly yours,  
Warren Coleman,  
Secretary.

#### Proposed Resolutions for Presentation to Medical Societies

*Whereas* Congress has undertaken to fix the doses of wine and whiskey and brandy by legislative fiat, thus taking over the functions of pharmacologist and physician, and

*Whereas* the Volstead Act compels physicians to betray the confidences of their patients by keeping a record of their diseases and ailments for inspection by Federal prohibition agents, thus violating the traditions of the medical profession, medical ethics and the laws of a number of states, and

*Whereas* relief from these conditions has been sought in the courts and has been denied by the United States Supreme Court, and

*Whereas* the Wickersham Commission has unanimously made the recommendation:

(1) "Removal of the causes of irritation and resentment on the part of the medical profession by: (a) doing away with the statutory fixing of the amount which may be prescribed and the number of prescriptions; (b) abolition of the requirement of specifying the ailment for which liquor is prescribed upon a blank to go into the public files; (c) leaving as much as possible to

regulations rather than fixing details by statute." Now therefore,

*Be It Resolved* that the Medical Society of the County of New York hereby formally expresses its disapproval of those portions of the Volstead Act which invade the right of the State of New York to regulate the practice of medicine within its own borders and which deprive the physician of his right to the exercise of his judgment in the practice of his profession; and

*Be It Resolved* that the Medical Society of the County of New York demand of Congress the repeal of said portions of the Volstead Act; and

*Be It Resolved* that the Medical Society of the County of New York urge each of its members to demand of his Senators and Congressman the repeal of said portions of the Volstead Act; and

*Be It Further Resolved* that the Secretary of the Medical Society of the County of New York be, and hereby is, instructed to transmit a copy of these resolutions to the Senators from New York and to each Representative in Congress of the County of New York.

#### Statement About Resolutions

The assumption by Congress in the Volstead Act of control over the practice of medicine in the United States has raised the most serious questions that have ever confronted the medical profession, (1) the right of the several states to regulate the practice of medicine within their borders and (2) the right of the individual physician to treat patients according to his training and experience. These questions have no relation whatsoever to prohibition as such: alcohol was merely the occasion of the assumption of the above-mentioned powers by Congress. Under other circumstances, Congress might forbid the use of toxin-antitoxin or forbid more than 3 grains of caffeine a day. The right of the state to regulate the practice of medicine within its borders concerns the members of the medical profession only as citizens. The right of the physician to the untrammelled exercise of his judgment concerns the welfare of his patients and his own freedom of action.

There were 2 ways of meeting the attack by Congress on the medical profession: (1) by testing the constitutionality of the medical provisions of the Volstead Act in the courts; and (2) by direct demand by members of the medical profession upon Congress for relief. The first method was tried and failed. A group of New York physicians organized the Association for the Protection of Constitutional Rights, consisting of 928 members in New York and neighboring states, to fight for the traditions and the rights of the medical profession. Dr. Samuel W. Lambert was elected President of the Association and under the auspices of the Association brought suit against the Government (*Lambert v. Yellowley*). An adverse decision was rendered by the United States Supreme Court.

If relief is to be had from the condition which exists, the individual members of the medical profession must now demand of Congress that the medical restrictions of the Volstead Act be repealed. Congress will probably listen to this. In order to promote this action the enclosed resolution, sponsored by the Association for the Protection of Constitutional Rights, is being sent to a number of medical organizations for consideration. The greater the number of organizations that adopt it, the sooner will the prerogatives of the profession be restored.

It should be added that the Association for the Protection of Constitutional Rights is in favor of stringent regulations to control the use of alcohol by physicians and of severe penalties for violation of the regulations. This will afford protection to those physicians who believe in, and use, alcohol in their practice and will at the same time restrain any physician who might be inclined to abuse his privileges.

If the resolution meets with your approval, would you be willing to present it to your State Society for action?

Samuel W. Lambert, President; James F. McKernon, Vice-President; F. E. Sondern, Treasurer; Warren Coleman, Secretary; John A. Hartwell, Samuel A. Brown, Harlow Brooks, Charles L. Dana, Nathan B. Van Etten, J. Bentley Squier, George David Stewart, T. C. Chalmers, Linsley R. Williams and James T. Gorton, members of the Executive Committee of the Association for the Protection of Constitutional Rights.

*Dr. G. V. Warner:* I am profoundly convinced that most every member of this State Society is in full accord with those resolutions. I would move, therefore, first, that we adopt that set of resolutions for the Medical Society of New Jersey and that we further instruct our Delegates to support the movement at the American Medical Association Convention.

The motion was seconded.

*Dr. A. H. Lippincott:* Has not that been taken care of?

*President Sommer:* How are they taking care of it?

*Dr. Lippincott:* The question of recording the name.

*Member:* You still have to put the amount and the illness on your record.

*Secretary Morrison:* You still have to put it on record in your office.

*President Sommer:* Is there any further discussion on this?

The question was put and the motion carried.

*President Sommer:* The report of the Executive Secretary is now in order. Dr. Reik.

*Dr. Reik* read his prepared paper, as follows:

#### Report of Editor and Executive Secretary

To the House of Delegates,

Medical Society of New Jersey:

In accordance with custom, we are presenting a detailed report of the various factors concerned in our own work and directing attention to a number of additional incidents and problems affecting this organization which pass under our observation and seem to be the business of no one in particular to report; feeling it to be a duty of the executive secretary at least to record such matters. Further following the usual plan, we shall divide the report into sections and attempt to fit in as appropriately as possible the different items to be reported.

(1) *The Journal.* If a president of the United States may without injury to his native modesty "point with pride" to the accomplishments of his



administration, surely a mere editor may be excused for directing attention to the things he has done or attempted to do during his reign. While serving in France with the American Expeditionary Forces, we learned some of the principles of successful warfare: (1) Cover the top and dash for the first objective! (2) Hold it! (3) Consolidate your gains! (4) Prepare to carry along all you have won and to jump off from the advance post at the next zero hour for a new objective. Thus, step by step, never relaxing hold upon any point attained, and always reaching toward new attainments, our efforts were crowned with success. Pershing's tactics were justified in war, and his battle principles seem applicable to most progressive affairs in civil life. So, we have endeavored to apply them to journalism.

In 1924 the Journal of the Medical Society of New Jersey was practically a replica of all other state medical society journals; that is to say, it regularly consisted of about 6 sections, or departments, covering Original Articles, Editorials, an occasional Special Article or Case Report, County Society Reports, Obituaries and New Items; the total of reading matter for the year making 400 pages. In 1930 this Journal exceeded 1000 pages—with an incidental increase of page size—embracing not 6 but 16 distinct sections or departments. One at a time, commencing with Lighthouse Observations and running through Ethics, Esthetics, Economics, Public Relations, Collateral Reading, School Health, Public Health, Current Events, and Woman's Auxiliary, 10 new departments have been introduced and, by constantly adding and never abandoning any established project, we have reached the present admirable monthly edition to which we dare "point with pride".

May we say that this degree of success has not been attained without many hours of hard labor—many hours more than the labor union restriction of an 8-hour working day—for our day never shows less than 12 and seldom less than 16 hours, and, as we suppose must be true, the editor of any periodical often wishes he might know whether his clientèle is sufficiently well pleased to justify all this expenditure of time and energy.

Occasionally someone thinks to express general approval or to praise a particular feature of the Journal; and on such days there is much joy in the editorial office. Recently we had a "red letter day". While attending a Cumberland County Society meeting one member voluntarily stated his pleasure in reading this Journal and his pride in it as the organ of his own state society. We asked what he liked best about it, and we were somewhat surprised by his response: "I like it best because you are giving us such a variety of interesting matter, all bearing on medicine or related to our professional lives, and yet much of it being material that I never before saw nor ever expected to see in a medical journal." It is scarcely necessary to say that we were rendered very happy, for he was the first to have mentioned discovery of the goal toward which we have been striving.

Just a few days later a second statement of the same import was received in a letter from a Hudson County member who wrote: "I have been following the state society Journal's expansion with a great deal of pleasure as well as benefit. It is beautifully departmentalized and, in my opinion, now stands at the top of all the state journals I have had the privilege of seeing."

Here, we may say it has been our constant en-

deavor to have the Journal record the scientific work of New Jersey physicians, to supply them with information concerning medical progress, to constitute a monthly medium of post-graduate instruction, and to keep our readers in touch with any and every thing that might be serviceable to practitioners too busy to read extensively in the field of general knowledge. In brief, we have attempted to make this state society Journal a *distinctive* member of its class.

After the experience referred to above we hastened to compare your Journal with those of other states, and we find that no other medical journal in this country, state or national, offers anything comparable to the wide variety of regular, monthly literary material of high grade that is contained in the Journal of the Medical Society of New Jersey. A few of the other state journals are "better dressed" and make a more striking appearance because they use a better quality of paper—especially important in the reproduction of illustrations—but in most other respects we equal or excel. Not only do we surpass other publications in *variety* but we are providing a much greater *quantity* of first class medical reading. As repeatedly pointed out, we consider many of our regular hospital staff and county society reports fully equal to the average of original articles.

By way of comparing our own progress in respect to quality of scientific matter published, our office secretary, Miss Mahoney, tabulated the material in the bound volumes of 1924 and 1930. The resulting figures showed 62 original articles in 1924, and 124—exactly double—in 1930; 13 pages of editorials in 1924, against 29 pages in 1930; 62 county society reports in 1924, and 124 in 1930; 48 pages of society and hospital reports in 1924, and 163 pages last year. And this does not take into consideration the wealth of excellent original material now annually contributed through the Tristate Medical Conference.

The only criticism of the Journal that has thus far reached the Editor is embodied in a complaint that some counties regularly occupy more space than others in the Journal; an implication that favoritism has been shown in some quarters. We answered that charge, denying the implication of course, editorially in the May Journal, but want to explain here and now that we *have never shown any partiality, in favor of or against, any county society or any medical institution in New Jersey.* Commencing with our first report, in June 1925, you will find that each year we have directed attention to the importance of recording county affairs and, on more than one occasion, have stated that if any county is not showing up satisfactorily, by comparison with others, the fault lies with the complaining organization. From some counties we receive excellent reports. From some counties we secure reports only by harassing the reporter with repeated appeals. The published county society report is an accurate index of the character and ability of the reporter. As each society elects its own reporter, each possesses the power to control the amount of journal space required. In like manner, some hospitals have capable, wide-awake secretaries who supply us with good reports. Any member finding his county society or his hospital inadequately represented in the pages of the Journal has the remedy in his own hands, for he has but to direct his complaint to the proper person in his own institution or organization. Each member should want to see his county holding a position of at least equality with

neighboring counties—he should take pride in having it excel all others—and we believe a friendly rivalry would stimulate all to strive for better results. Mere envy or jealousy of another county will not, however, profit anybody. Improvement can come only from bettering conditions where weakness is found; it will not come from destroying conditions that indicate strength.

That you may personally have an opportunity to make some comparisons we are, following the plan of last year, exhibiting in the adjoining room the regular May issue of some 30 other state society journals, and we invite criticisms and suggestions for further improvement of your own magazine. The only recommendation the Editor has to offer at present is that as soon as the financial situation permits, we may be instructed to contract for a heavier grade of paper with a good reproducing surface.

As stated before, we fully appreciate any word of praise accorded our work, but we reached the pinnacle of happiness a few days ago, when the monthly bulletin of the Middlesex County Society, issued as a call for the April meeting, carried the following announcement: "Hereafter, the Saturday Evening Post stays on the shelf; the Journal comes first." No greater tribute could be paid, and we thank the secretary of that society.

There are some special features of the Journal about which we would like to speak further. During the year 1930, we devoted 25 pages to the Woman's Auxiliary, more space, we believe, than has been accorded by any other Journal; endeavoring to stimulate interest and to guide the activities of that young organization. Also, auxiliary members have been kept in mind when selecting books and articles for review in the Department of Collateral Reading—which occupied 30 pages of the Journal.

We have for several years given considerable attention to Medical Economics, but for 6 months past more space than usual has been allotted to subjects of that nature, because at the present time so many economic problems are pressing for solution. If you have not read the Journals of March, April and May, particularly, we ask you to do so because the interesting topic of *state medicine* is there presented for consideration with such facts as we have been able to gather. "In knowledge there is strength", and it seemed to us well to collect and impart to members this knowledge that our hands may be strengthened to prevent or to meet any emergency. It may be well to repeat here what we have said in the Journal and elsewhere on several occasions—that in presenting information about "Health Insurance Laws" in other countries we have not done so in advocacy of state medicine but merely for the purpose of enlightenment.

In the February Journal we published an editorial denouncing the character of advertising used to sell Lucky Strike cigarettes, and in March discussed the action of physicians who sign tobacco testimonials under the guise of health crusading, apparently without giving thought to the reflex effect upon their profession. So long as physicians in good standing continue to sign any paper put into their hands along with a cigar or a packet of cigarettes, we cannot expect the people to hold the profession in very high esteem. We cannot help wondering whether any of those who signed the Lucky Strike questionnaire have since realized that they contributed to the \$2,000,000 bonus that was awarded the man who devised that scheme of securing professional

endorsement and then used it as the effective factor in the company's advertising campaign; it appears that upon an investment of less than \$25,000, the company reaped such huge profits that it could afford to pay the aforementioned bonus to the man who conceived that advertising device.

Some of you will have noticed the Old Gold advertisement, in which an illustration is used purporting to show a group of throat specialists and nurses, aseptically dressed, in an operating room, interrupting a surgical procedure to test the varying effects of different brands of cigarettes. As the ad was endorsed by Ripley, of "Believe it or not" fame, we wrote him that *we did not*, and asked for proof that the statements made and implied were authentic. We have since learned that the picture was *not* photographed in a hospital, but was made in a studio, and that the alleged throat specialists were *not* genuine. The test was vouched for by 7 physicians practicing in New York City who posed as throat specialists. We investigated 3 of the group and found that 2 were listed in the American Medical Association Directory, but only 1 as a member; none were recognized by the Medical Society of New York as qualified throat specialists; the name of 1 could not be found in any directory. With regard to Luckies, we were challenged by the attorney for the manufacturers and promised proof that all the Lucky advertising matter was truthful and based on scientific experiments. We have been supplied with considerable reading matter but with nothing that can properly be denominated "proof".

Those of you who pay any attention to the radio programs cannot but have been annoyed by much of the advertising matter broadcast along with musical or other entertainment; even Amos and Andy, long used in exploitation of a dentifrice, are now preceded or followed by an announcer who *actually prescribes for sore throats and common colds*. We believe that the medical profession should conduct a definite, aggressive campaign against the false and misleading advertising now being presented in papers and magazines and broadcast by radio, because so much of it concerns the health of the people. Our personal efforts, limited as they have been, indicate that an organized attack would effect good results. It is a never-ending fight, perhaps, but that is no reason why we, who know the falseness of those ads and who can estimate their evil effect, should not assume the responsibility of exposure. We have suggested elsewhere that the services of the Woman's Auxiliary might be enlisted in such a warfare, and that the society and auxiliary might well cooperate in exposing some of the fraudulent advertising used in the sale to women of cosmetics and other preparations.

In this connection, I wish to offer for your consideration, and adoption if approved, the following resolutions:

*Whereas*, it is a growing practice among commercial advertisers to use the alleged endorsements of physicians in such a way as to mislead the public and misrepresent medical opinion; and

*Whereas*, in promoting the sale of cigarettes and cigars, especially, this type of advertising is widely used to create the belief that physicians actually prefer and recommend certain brands of these products as aids to health; and

*Whereas*, in the opinion of this body no reputable physician would knowingly grant the use of



his name or his authority to foster such a false impression; therefore, be it

*Resolved*, that the Medical Society of New Jersey in convention assembled condemns such advertising and urges its refusal by all publishers and others in control of advertising media; and further

*Resolved*, that this society calls upon physicians everywhere to guard their own reputations and the reputation of their profession by refusing to permit such misleading, unethical use of their names or opinions.

(2) *County Societies*. During the fiscal year it has been our privilege to visit all but 2 of the 21 county societies at least once, and to have made 2 visits to one county and 3 to another. It is a pleasure to report that all of the component societies are active and most of them are functioning in a praiseworthy manner. Following the custom established by his immediate predecessors, President Sommer has also attended regular meetings of 20 of the 21 county organizations, and we note with increasing satisfaction the good results of presidential visits and visits made by the Secretary of the state society, Dr. Morrison. It is not solely that the county members and the officers enjoy an exchange of pleasantries and sociability, but *each county unit feels that it is an important, integral part of the state and national organizations*. With state officials present to be quizzed, the county members have brought up for consideration some of the problems that beset them and which vary in different communities. Especially is this true of economic problems, and this year it has become manifest that the state society must help to solve some of these problems, particularly those relating to the Workman's Compensation Law, and those growing out of industrial medicine as it is developing in a variety of forms all over the state. We respectfully suggest that the House of Delegates shall take some action with reference to these matters; at least provision should be made for a thorough study of these problems.

The Annual Conference of Secretaries and Reporters of County Medical Societies was held at Trenton, November 5, 1930, and this proved to be the most interesting session so far held. The proceedings were published in full in the December Journal, pages 1000 to 1020. It was at that conference that Dr. Walter F. Donaldson, Secretary of the Pennsylvania Medical Society, spoke of the advantages of Councilor District Meetings, and it was out of the discussion following that our own secretaries, led by the presiding officer, Dr. George H. Lathrope, devised the plan for trying such district meetings in this state. Of our 5 districts, 4 have held meetings during the past few months and while different plans were used, according to the needs or the wishes of different sections, or as experiments in some regions, we believe that all proved successful; and we anticipate that this society will be asked to give official endorsement to the general scheme.

It was at that conference, also, that Dr. Morrison read his paper on the possible imminence of *state medicine*; calling attention to its rapid spread in foreign countries, its appearance in Canada and its threatened advent here as evidenced by bills introduced into several state legislatures. The conference, at the suggestion of Dr. Fuhrmann, of Hunterdon County, adopted a resolution to ask the state society at this annual meeting to appoint a special committee to in-

vestigate the working of so-called state medicine in other states and countries, to collect all available data, and to report the results at some future meeting. Since the date of that conference, legislative acts have been under consideration in the states of New York and Massachusetts, and though both bills were defeated, the physicians of Greater Boston have held a meeting to consider what can be done to prevent enactment of a law providing for state medicine in the fullest sense.

If any of you think this is idle talk, let us read to you from the Boston Medical and Surgical Journal of May 29, 1930, the following editorial note: "There is going on before our eyes a socialization of medicine. How far it will go no man can tell. What reaction it will call forth we cannot say. But, whether we like it or not, there it is." In the same Journal, on April 2, 1931, opening a symposium on public medical relations, appears this statement: "The whole subject is a very important one, particularly at this time when state medicine is being discussed seriously and is being practiced to a certain degree by our health officers. Unquestionably, there will be an organization of medicine throughout the state and a control of practitioners. It is necessary for the medical profession seriously to consider and advocate some plan which will be acceptable to its members. The writer (Dr. H. F. Day) feels that if this is not done, a plan less acceptable to practitioners will be forced on them by legislation. Therefore, he hopes that the doctors of Massachusetts will read these papers carefully and begin to think about some scheme they could advocate and of a plan which they could back as fair to the lay public and acceptable to the largest number of doctors in the state."

Further to show you that so-called state medicine is now being considered by state medical society officers in all sections of these United States, allow us to quote one paragraph from an article by Dr. C. A. Harper, President of the Wisconsin Medical Society (Wisconsin Med. Jour., Jan. 1931, p. 24): "The facts strongly emphasize a popular demand for certain changes that will comply, more or less, with the wishes of the general public. Is it wise for the medical profession to remain indifferent to the problem while these agencies are developing certain lines of activity, or would it not be far better to appreciate the evolution that is taking place, and become a prominent factor in guiding these various lines of procedure?"

That question is duplicated and answered, as it were, by the President of the New York State Medical Society, Dr. Ross, from whose comments in the Journal of that state society, dated November 1, 1930, page 1290, we now quote: "Times are changing and willingly or not we must change. \* \* \* The public realizes that the doctor is better fitted than anyone else to render health service, and the public looks to him primarily for this service. \* \* \* It will little avail us to fail to cooperate. \* \* \* All that the non-professional agencies want is that the medical man shall lead them. They just want leadership, and if the profession is not willing to give this, how can we justly continue to find fault with somebody who offers to help us meet problems of medical service that have been waiting for us just about as long as they will wait? Someone must answer insistent public demands."

Returning now to our theme, we desire to report that these conferences of secretaries and re-

porters have had a very beneficial effect upon many of the county societies; one very noticeable improvement showing in the character of programs now being issued.

The "Blue Book" entitled "Membership in the Medical Society of New Jersey; Is It Worth the Price?", prepared by Dr. Morrison, sponsored by the Welfare Committee, and distributed to all members of the state society, has proved most helpful to the organization. It has been used to demonstrate to all members exactly what the state society is doing, to direct attention to the available benefits of membership, and to induce an additional number of physicians to become members. If any member failed to receive a copy or desires extra copies of that booklet, we still have some for distribution.

At a recent meeting of the Hudson County Medical Society, Dr. Waters submitted a new plan for revival of the periodic health examination campaign. The Executive Secretary has volunteered to assist Dr. Waters in the preparation of a moving picture to illustrate his plan, and when ready such picture will be made available to all of the county societies. We intend also to supply the secretaries of all county societies with a list of all moving picture films made available by the American Medical Association, the American College of Surgeons, the American College of Physicians, the United States Government, and some commercial houses that have produced pictures without advertising matter. We would also remind you that the state society owes projection apparatus for films of both sizes, the standard 35 mm. and the smaller 16 mm., which are at your disposal whenever required.

The Journal of the American Medical Association for May 2 contained the annual official reports of officers and we note that New Jersey is the *only* state (the District of Columbia not being counted) that has, during the year, shown an increase in the number of subscribers to the national Journal; and, further, that New Jersey stands *second* in the percentage of physicians who subscribe. The states showing the highest percentage of subscribers in proportion to practicing physicians, rank as follows: Arizona first with 78%; New Jersey second, 75%; Connecticut third, 70%; Illinois fourth, 69%; Wisconsin fifth, 68%; and Massachusetts, Minnesota, New York and North Dakota compete for sixth place with 67% each.

Much has been said in recent years about the value of the county medical society as the basic element in the structure of medical organization, and we have dilated upon the importance of mass action, of group consideration of economic problems, and even of the satisfaction to be derived from closer social intercourse among physicians practicing in any given territory, but we doubt if anyone has properly evaluated the personal gain sentimentally of friendship formed through the county society meetings. On Saturday afternoon May 2 we visited one of the beachfront hotels in Atlantic City to call upon a member of the state society who, we had been informed, was resting there to recover from a nervous breakdown resulting from too strenuous work. We found him much improved by his sojourn beside the sea and he handed us, to read, a letter that he had received from the secretary of his county society. The letter had accompanied a book sent by the county society and expressed sympathy and the hope that he would make a speedy recovery. When we had read the letter, he said: "Do you know, doctor, I always thought that

those fellows didn't like me much, that they considered me an odd specimen, but when I received that book and read that letter, I realized that they really do like me, think enough of me to send a kindly message of sympathy and good will, and I actually wept. Why, I would rather have the respect and the real friendship of any one of my fellow physicians than of any 20 laymen, though I have many good friends among the people in my county." If you could have seen his face as he said that, you would have realized that the bond of friendship forged in his county society had done more than medicine, rest, or the "previously unbreathed air" of Atlantic City, to restore him to health, and would have understood as we did that *sentimentality* is another excellent reason for membership in the county unit of medical organization. The "brotherhood of man" is probably better exemplified in medical societies than in any other known fraternity.

(3) *Woman's Auxiliary.* This organization continues to thrive and we think has made definite progress this year. The Editor is lending such aid as he may through the Journal and continues to hope that an effective organization will ultimately develop in every county.

Coöperating with the President of the State Auxiliary, Mrs. Nevin, he has suggested, as a task for the auxiliary, an effort to control some of the obnoxious advertising being published in papers and magazines and broadcast by radio. Mrs. Nevin will probably present that question for consideration by the auxiliary and by the society during this meeting.

If the society is willing to conduct a special public educational campaign, exposing the fallacy of many of the claims made in advertising matter for cancer cures, drug nostrums, and toilet and cosmetic preparations so widely advertised by newspapers, magazines and radio speeches, and if the auxiliary will coöperate in that campaign, we can supply the auxiliary with a task that will fully occupy its energies and this society will profit by its help in a field where the auxiliaries' assistance should be particularly profitable. That the time for such a campaign is ripe is evidenced by a number of recent occurrences. For instance, at a recent meeting of the American Manufacturers of Toilet Articles, the general director of the International Magazine Company advised the convention that unless a change is promptly made in the exaggerated statements used in advertisements, it might be anticipated that the Federal Government will institute a censorship and take action to restrain such false and misleading advertisements; concluding with the statement that even magazine publishers are "getting tired of seeing unfair advertising matter in their publications". At another national meeting, this time of publishers, a publicity councillor advised his audience that "the question of truth in advertising is becoming a very serious one, for it involves the honor and dignity and usefulness of our profession". The Commissioner of Health of New York City has recently aided in the preparation of a directory of nostrums that are either worthless or which make use of unfair and misleading advertising methods; and the secretary of the Council on Dental Therapeutics of the American Dental Association has gone so far as to propose a revision of the State Sanitary Code to prohibit or regulate the sale of certain whole classes of drugs, such as alleged cures for cancer, tuberculosis, asthma, weight reducers and contraceptives. In an international broadcast, on Sunday,



March 22, no less an authority than Lord Moy-nihan, President of the Royal College of Surgeons of England, warned the world of the dangers attending quack cancer cure advertising. In that connection, you may have noticed some of the ridiculous propositions that are now being exploited, such as the "ultraviolet radiat'on of salt water taffy" and the use of "iodized eggs" for the conservation of health and the energizing of life; it being explained, in the last mentioned advertisement, that by adding a small amount of iodine to ordinary chicken feed the hens can be induced to lay eggs that will be especially useful in the prevention of goiter.

The Bureau of Health and Public Instruction, of the American Medical Association, says in its pressional report (Jour. A. M. A. May 2, 1931, page 1488): "Repeated comments and complaints are received at headquarters of the enormous amount of misinformation that is being given to the public by quacks, faddists, and similar agencies. The radio, newspapers and magazines, personal letters—all are used for this purpose. The question is asked: 'How can we suppress or combat these activities?' It is not possible to suppress them. The only feasible way to meet them is for the medical profession, individually to patients and collectively through medical societies to the public, to disseminate as widely as possible truthful, authoritative information about health matters." To this end, the Bureau asks the assistance of state and county medical organizations.

A year ago we issued another "blue book", setting forth the history of the Woman's Auxiliary movement and indicating a number of things from which local auxiliaries might select tasks suitable to their respective communities. That book met with a hearty reception by the national auxiliary and by state organizations all the way to California, and we have recently received a request that a second edition be prepared with the inclusion of other useful suggestions to auxiliaries. Whether or not that shall be done is a question worthy of consideration by this body and its associated Woman's Auxiliary.

(4) *Educational Work.* Our program during the year has been even more extensive than usual. The Field Secretary will report personally upon that part of the program entrusted to her. We would only say here that she has, with the assistance of the State Department of Education, reached a very large number of desirable audiences and that she has accomplished the fulfillment of a huge program. That her work has been of superior character is evidenced by the number of commendatory letters received from each of the counties visited by her, and by the almost universal request that she return again next year. As a sample of such letters, we would like to read one received from the Supervising Principal of the Board of Education of Hunterdon County, dated from Lambertville, May 5, 1931: "On Tuesday, April 28, we had the pleasure of listening to Mrs. E. C. Taneyhill, Field Secretary, State Medical Association. At 1 p. m. she addressed my high school student body on the subject, 'Louis Pasteur'. In my 6 years' connection with Lambertville Schools I have never heard a more inspiring, interesting educational address. Mrs. Taneyhill took 45 minutes to deliver it and in this time held the attention of the student body intact. Every teacher and every pupil was simply thrilled. At 2.30 she addressed the entire teaching staff on the subject, 'Mental Hygiene'. Since hearing her I have had many

of my teachers inquire when she would return. Everyone was thoroughly enthused over her subject and her extremely pleasing personality. I am indeed grateful to you and to her for the inspiration given my teachers on the subject of 'Mental Hygiene', and sincerely thank you for sending her. Hoping to have her return at some future time, I am

Sincerely yours,  
(signed) Robert E. Williams,  
Supervising Principal."

That is but one of many letters received during the past year from county school authorities all the way from Cape May to Warren County, and we would like it clearly understood that all such letters have been sent in *voluntarily*, for neither the Field Secretary, the Executive Secretary, nor the Health Director of the State Board of Education has ever asked for or in any manner sought endorsements of the Field Secretary's work.

At a public health meeting held in Philadelphia in April, under the auspices of the Philadelphia Medical Club, the Pennsylvania State Director of Public Health, Dr. Appel, spoke of the excellence of our plan of taking preventive medicine into the public schools and especially commended it because of the recognized fact that it takes about 25 years for any idea to grow, and he thought our educational efforts should be directed at the public schools.

Our radio program has been carried this year mainly by the county societies and it is a pleasure to report the excellent service rendered by the medical societies of Atlantic, Bergen and Monmouth Counties.

In Atlantic County, a special committee of the local society, under the chairmanship of Dr. Conaway, took over our privilege of broadcasting from radio station WPG, and issued weekly health talks at 4.30 p. m. on Fridays or Wednesdays from January 2 until March 25, both dates inclusive. The names of the speakers and the titles of their talks were as follows:

Rabies .....	Samuel Salasin, M.D.
Unseen Enemies of Child-hood .....	Joseph Marcus, M.D.
Preservation of Vision.....	Albert Pilkington, M.D.
Christmas Seal Sales.....	Henry O. Reik, M.D.
Common Colds .....	Harold Davidson, M.D.
Prevention of Pneumonia ....	Robert Grier, M.D.
Heart Disease .....	Hilton Read, M.D.
Mental Hygiene .....	Cole Davis, M.D.
Tuberculosis .....	Clyde Fish, M.D.
Asthma and Hay-Fever.....	Samuel Barbash, M.D.
Vaccination .....	A. C. Crowe, M.D.
Diabetes .....	D. Ward Scanlan, M.D.
Blood Pressure .....	Philip Marvel, Jr., M.D.
The Story of Anesthesia.....	George Poland, M.D.

In Bergen County, we are informed by Dr. Wolowitz that the county society has broadcast weekly talks, 25 in number, 21 talks from Radio Station WBMS, and 4 talks from Station WOR; the list of speakers and topics being as follows:

#### Station WBMS

Tuberculosis .....	Joseph R. Morrow, M.D.
Electricity in Medicine.....	Spencer T. Snedecor, M.D.
Advantages of the Hospital .....	Edward W. Clarke, M.D.
Anesthesia .....	Harry B. Wolowitz, M.D.
Curability of Tuberculosis .....	Harry B. Wolowitz, M.D.
Modern Surgery .....	Michael Sarla, M.D.
Food Values .....	Herman Trossback, M.D.

## Health of the School

Child ..... Edmund E. Sawyer, M.D.  
 Focal Infection ..... George M. Knowles, M.D.  
 Tuberculosis ..... Harry B. Wolowitz, M.D.  
 Maternal and Prenatal

Care ..... Harrison Wilson, M.D.  
 Blood Pressure ..... Samuel B. Reich, M.D.  
 The Circulation .... William K. Harryman, M.D.  
 Animal Experimentation in

Medicine ..... F. C. McCormack, M.D.  
 Relation of Infected Tonsils

to the General Health .. Charles Littwin, M.D.  
 The Visiting Nurse Service..Mrs. Theodore Dunn  
 Sinus Disease in Chil-

dren ..... William Greenfield, M.D.  
 Vitamins in Infant Feed-

ing ..... William B. Prout, M.D.

Fear of the Doctor .. Harry B. Wolowitz, M.D.

Hygiene ..... William L. James, M.D.

Varicose Veins .... Harold H. Vandersluis, M.D.

## Station WOR

Anesthesia ..... Harry B. Wolowitz, M.D.  
 Early Tuberculosis ..... Joseph R. Morrow, M.D.  
 Abdominal Pain ..... Wilson D. Webb, M.D.  
 Animal Experimentation

in Medicine ..... Frank C. McCormack, M.D.

Dr. James F. Ackerman, Chairman of the Radio Committee of the Monmouth County Medical Society, reports a successful season of work from the radio station in Asbury Park, WCAP. Dr. Altschul, who served as a member of that committee, writes as follows: "From what we can judge, the lectures have stimulated quite an interest and the manager of the station informs me that on occasion when these broadcastings have not appeared in the regular schedule, the station receives many telephone calls and inquiries as to the reason for such omission." Dr. Ackerman has supplied us with the following list of speakers and subjects on the society program:

History of Medicine ... }  
 Influenza ..... } James Ackerman, M.D.  
 De senectute ..... }

Psychology of Childhood }

Life Expectancy ..... Joseph Ackerman, M.D.

Cancer ..... W. G. Herrman, M.D.

Some Interesting Gynecologic Data ..... Robert MacKenzie, M.D.

Prevention of Disease in

Babies and Children ... Stanley Nichols, M.D.

Ethical Medicine As It Re-

lates to Public Service ... L. L. Leonard, M.D.

Cancer ..... O. R. Holters, M.D.

Treatment of Obesity ..... W. Gosling, M.D.

Diabetes ..... F. J. Altschul, M.D.

State Board of Medical Ex-

aminers ..... Joseph Bryan, M.D.

The Modern Heart ..... J. C. Clayton, M.D.

Aviation Medicine ..... Henry Rorr, M.D.

Tuberculosis ..... W. H. Fairbanks, M.D.

First Aid and Fractures... D. F. Featherston, M.D.

Care of the Nose and

Throat ..... James A. Fisher, M.D.

Skin Tumors ..... W. F. Jamison, M.D.

Prophylactics in Children... C. D. Prout, M.D.

Obesity ..... H. G. Thomas, M.D.

Something I Até ..... D. Traverso, M.D.

Emergencies ..... J. Villapiano, M.D.

Contagious Diseases ..... R. Watkins, M.D.

Overheating of Houses .... Frank Wilbur, M.D.

Medical Thoughts ..... G. Wilbur, M.D.

Head Colds ..... L. F. Albright, M.D.

Communicable Diseases of Chil-

dren Schick Test, Dick Test, Wm. Heatley, M.D.

Tetanus ..... T. E. Fenton, M.D.  
 Exercise ..... R. Appleton, M.D.  
 Diet ..... Byron Blaisdell, M.D.  
 First Month of Life ..... W. Von Oehsen, M.D.  
 Hypertension ..... R. L. Leighton, M.D.  
 Common Colds ..... B. S. Levine, M.D.  
 Itelation of the State Medical

Society to the Public .... Henry O. Reik, M.D.

We trust that these 3 county societies will continue their radio activities through the coming year, and that other counties where broadcasting facilities are available will join in promoting this feature of the state society's educational program. You are, of course, all aware of the fact that a great deal of broadcasting is being done by medical fakirs and by commercial organizations interested in the advertising of quack remedies and the giving of dangerous medical advice. We can best meet that situation by developing our program of honest health talks.

(5) *Public Relations.* Among the larger movements participated in this year were the Hoover Child Welfare Conference in Washington, which was attended by the Recording Secretary, the Field Secretary, and the Executive Secretary as official representatives of the state society, and by many members in their official and nonofficial characters, and the similar state conference called by Governor Larson. Having been designated by President Sommer to represent the state society at the organization meeting called by the Governor, we participated in the session at which plans for the convention were considered. Later, we were invited to speak at the conference in New Brunswick and had assigned to us the subject of "Coöperation". On that occasion, we endeavored to make clear to lay organizations the proper relationship of the medical profession to such movements and the conditions upon which we must insist if there is to be effective coöperation in public health work. Inasmuch as our address constituted a sort of "bill of rights", and a declaration of conditions under which the medical profession might be expected to coöperate with lay organizations, and as the conditions should be endorsed by this body, if acceptable, in order that they may be recognized as the basic principles for future negotiations, we deem it worth while to submit the essential parts of that address herewith.

We understand that New Jersey was the first state to comply with President Hoover's request for a special conference of this character. After referring to the work of the national conference, we said: "The Children's Charter adopted by President Hoover's White House Conference comprises 19 sections and, while we concur in approval of the entire charter, we recognize the fact that at least 8 of those sections are specifically medical in character and demand of us special consideration. Every wide-awake physician will see in that charter an elaborate program for converting knowledge into action, but that, after all, it calls upon us for nothing more than the leaders in the medical profession have been teaching and preaching for many years \* \* \*. If I interpret correctly what is expected of each state in making effective the welfare program that is to be evolved from the charter, we shall require the active support of all agencies, public and private, that may affect health or education. Besides demanding proper conditions in the home, that program calls for supervision of the child's school life from the kindergarten to the college, and over all other contacts with the world made



by the child outside its home. It means intelligent aid on the part of parents; school authorities; school teachers; public health authorities; school and private physicians, dentists and nurses; school and other agencies that deal with physically or mentally handicapped children; the state labor and all regional police departments; and recreational and cultural institutions. Inasmuch as the interests of these numerous and various elements must overlap in places, it becomes a matter of importance that we all agree to cooperate wherever and whenever our respective fields of labor come into contact.

Since health is the predominant factor in this program, it will not be surprising if the burden falls most heavily upon those intimately concerned with the medical problems. We note that the charter calls for prenatal care of the child's mother—surely that is beginning close to the starting point in the child's life—and that thereafter the physician, dentist, nurse, and health instructors of one kind or another, must accompany the child through adolescence to womanhood or manhood. There will be many opportunities for cooperation, among these health conductors; and, doubtless, there will be as many opportunities for clashing, for disagreement, even for violent opposition. Cooperation can be had; opposition must be avoided. All of us will need, at times, to be tactful. \* \* \* I have said that much of your program must be of a medical character and its development will necessarily depend upon the aid rendered by physicians. When a medical problem is under consideration, physicians naturally, and quite properly, believe that they know more about it than do untrained laymen; and they as naturally and properly resent being told by laymen how it shall be solved and what part the physician must or may play in effecting the solution. If you discover a problem of medical nature and ask the physicians to help solve it, they will most likely explain what is required and acquiesce in the invitation to help. If, on the other hand, you establish a public clinic or inaugurate some scheme requiring professional assistance, and then attempt to foist that work upon the physicians, they will, of course, be resentful and anything but helpful. You would do exactly the same thing if conditions were reversed. Very rarely will any physician oppose any so-called health movement; he is much more likely to promise cooperation in a movement that has not fully won his approval—a cooperation that he did not whole-heartedly intend—and that is what I referred to as lip service cooperation. If you want his earnest cooperation you must approach him in a fair manner and make it evident that you do not mean to take any unfair advantage of him or his associates. To the medically untrained mind many health problems look very simple; but things are not always what they seem. If they were as simple as they appear, it is reasonable to assume that they would have been solved years ago. If the combined knowledge and intelligence of the medical profession—containing some of the most brilliant minds the world has ever known—has not as yet been able to solve such problems, is it fair to assume that any group of untrained persons can step up and apply the answer magically?

Let each group of us here assembled work as best we can for the development of this child health and welfare program, but let us be careful not to arouse conflict by over-stepping the boundary lines of our own abilities. Doctors, dentists, nurses, teachers and social workers have

their respective, well-defined, fields of labor. Doctors *know* that they cannot do the nurse's or the teacher's tasks; and doctors *think they know* that nurses and teachers cannot properly do the doctor's job. We all know that we can secure the quickest and most satisfactory results by that sort of real cooperation that renders 'unto Cesar the things that are Cesar's'."

Following in the footsteps of the national conference, the New Jersey Conference on Child Welfare adopted a series of resolutions which embody a considerable amount of work for the medical profession if the procedures recommended are to be made effective, but we refrain from reporting that program, under the assumption that the whole matter will be explained in the paper to be presented by Dr. F. C. Johnson, and that the conference probably delegated someone to present a report to this society.

(6) *Tristate Conference.* The proceedings of each successive conference have been published in full in our Journal with the sole exception of the session held in Philadelphia last month. The direct and indirect benefits to the medical profession of New Jersey, arising out of these conferences, have been so great as to justify our request for continued support of this project. There is one question, however, upon which we desire to ask special consideration and specific action. At the conference held in Atlantic City, December 6, 1930, we presented a paper under the title "Automobiles More Deadly Than War; Can We Control Their Death Rate", and the conference adopted our recommendation that efforts be made by the medical societies of New York, Pennsylvania and New Jersey to secure adoption of a standardized plan for physical examination of those who seek a driver's license. It was pointed out in that address that more than 33,000 people were killed by automobiles during the year 1930; that there had been an annual increase of 10% in the number killed each year for a long period of time and that there was no evidence of prospective reduction of this percentage for next year; that in addition to this death rate the number of persons injured by automobiles during the past 10 years has reached the astounding figure of 5,000,000. The most recent report issued by the Traveler's Insurance Company, on May 14, 1931, shows that the 10% increase rate is continuing thus far into this year. We outlined a simple method of procedure which we believed would, if adopted by the state departments controlling motor vehicles, materially reduce the number of accidents and deaths. Although the Commissioner for New Jersey did us the honor to adopt our slogan—"Automobiles More Deadly Than War!"—we have not been able personally to induce him to consider any change in the present almost useless plan of examining candidates. In the state of New York an act was presented to the legislature, to provide for such examinations as the conference recommended but we are not as yet informed as to its fate. We are under the impression that no additional legislation is necessary in New Jersey; because, apparently, the Commissioner has full legal authorization to determine what sort of an examination shall be made. We would like to have the full force of this society put behind these recommendations and brought to bear upon the Commissioner in Trenton. Our recommendations and the scheme of examinations proposed are fully set forth in the February Journal.

(7) *State Legislation.* You will doubtless receive from the Chairman of the Welfare Com-

mittee a detailed account of our legislative work during the past year. It will suffice here to say that the usual number of bills, designed to confer upon unqualified persons the right to practice medicine, were introduced, but it is pleasing to report that not one of them got out of committee this year. While the state society introduced no bills of its own, the Welfare Committee gave its approval to 18 bills that in one manner or another bore upon public health questions, and 10 out of that number were enacted into law. At the same time the committee registered its opposition to 7 bills and not 1 of that number was adopted.

In the matter of legislation presented by or affecting organizations more or less closely allied with medicine, we were able to cooperate this year in a manner that was possibly mutually helpful, and we may report at this point that we have been invited to address the New Jersey Pharmaceutical Association, on the subject of cooperation, at its convention to be held later in this month.

During the year 2 questions have arisen in the Welfare Committee, upon which this House of Delegates may wish to take action. First, is the time opportune to seek an amendment to the hospital lien law so that physicians and nurses may be protected along with the hospitals? Secondly, shall we ask for an amendment to the Medical Practice Act, providing for a Grievance Committee similar to the one that is featured in the New York law and which seems to have given complete satisfaction during the 3 years that it has been in effect?

(8) *National Legislation.* For several years past we have been called upon for an increasing amount of support in the matter of legislation at Washington, and during the past winter it was found necessary to devote considerable attention to that field of work. In so far as was possible, we rendered the requested service and we have both given and received cooperative help with the Bureau of Legislation of the American Medical Association.

(9) *History.* It has been previously reported to you that there is in course of preparation a History of Medicine in New Jersey. There can be no doubt that a comprehensive history of medical affairs in this territory, commencing with conditions that existed before the first white settlers arrived on Jersey soil and coming up to the present day, would be interesting to the people of the state and constitute a creditable monument to the medical profession. No such history is now available; the facts being widely scattered through general as well as professional literature and state records. At the present moment, work upon that history is well advanced—we believe that it is more than half-way completed—and it is hoped that the subject matter may be ready for publication before your next annual convention. Attention is called to the matter now partly for the purpose of reporting progress and partly to remind you that the day is not far distant when you will be offered the opportunity to purchase a copy of such a history.

(10) *Office Observations.* Finally, we would be negligent of a duty and neglectful of a privilege if we failed to again make report upon the excellence of service rendered throughout the year by the office secretary, Miss Margaret Mahoney. Faithful and skilful in performance of all her routine duties, she has been more than ever helpful this past year in lessening some of our burdens by voluntarily rendering assistance in our

field of work. The regular office work has grown to such proportions as would prove a severe tax upon any ordinary individual, yet she has managed to handle it satisfactorily and be ever ready to help when our tasks were especially heavy. It may interest you to know that in the single matter of mail, our office issues in the course of a year more than 5000 outgoing pieces of mail. The average daily output during the winter months is 20 letters, and days of 50 separately written letters are not uncommon. Those of you who are accustomed to a large correspondence will know that dictating 50 letters in 1 day is no small job, and will realize that taking notes, transcribing and typing that many letters is a rather heavy task. We trust that the organization recognizes in Miss Mahoney not only a competent and faithful servant but an employee of exceptional ability, unusual willingness to perform extra work, and absolute loyalty. Our personal obligation to her for contributing to the smooth running of our part of the machinery is frankly acknowledged.

Respectfully submitted,

Henry O. Reik, M.D.,  
Editor and Executive Secretary.

*President Sommer:* You have heard the reading of the Executive Secretary's report, what is your pleasure?

*Member:* I move that it be received.

The motion was seconded.

*Dr. B. T. D. Schwarz:* May I suggest now that a committee be appointed, in accordance with Chapter 8, Section 12 of the By-Laws, in order that proper consideration may be given the many excellent recommendations embodied in this report?

*President Sommer:* I will appoint the Miscellaneous Business Committee as follows: Dr. Todd, of Paterson, Chairman; Dr. Haggerty, of Trenton; Dr. Sherman, of Newark; Dr. Lippincott, of Camden; and Dr. Conaway, of Atlantic City.

It has been moved and seconded that the report of the Executive Secretary be received and referred to the Business Committee.

The question was put and the motion carried.

*President Sommer:* There is one other committee to be appointed for this meeting and that is the Reference Committee on Constitution and By-Laws, and I appoint Drs. Quigley, Morrison and Lathrope.

We shall now listen to the report of the Recording Secretary.

*Secretary Morrison:* Mr. President and members: The receipt of a telegram announcing Dr. Hunter's death, just before I left home, so upset me that I left my typed report, which was to be presented at this meeting, on my desk for some last minute corrections and I find now that it was not included in the material I brought along. The relation between myself and Dr. Hunter, and between Dr. Hunter's family and my own, was so intimate that this thing has swept me off my feet



for the time being. So, I shall give you, in order to conserve time here, only a résumé of my report, and will supply the typed copy for publication in the transactions.

Secretary Morrison presented extemporaneously the report which follows:

### Report of the Secretary

To the Officers and Members of  
The Medical Society of New Jersey:

This session opens the 165th annual convention of our ancient and historic society. At the meeting in Atlantic City last year only 47% of the elected Delegates were registered, and of the 53% classed as absentees, only 15% were represented by alternates. That was a 30% smaller representation than we were accustomed to have under the old system with Permanent Delegates. I am just leaving these figures with you and am wondering what, if anything, can be done to make these elected delegates realize the duty they owe to themselves, to the component societies and to this society.

Our total membership at this date is 2709, which marks a very considerable gain over last year when at this date we reported 2542.

The Medical Society of New Jersey has no delinquent list. Some of the component societies carry you along if you do not pay your dues. The State Society does not. You either belong or you do not belong, and every member who has not paid his dues prior to February 5 of each year forfeits all his rights and privileges. So, we have been in the habit of reporting as 100% paid up those component societies which submit as many names for the Official List any given year as were sent in the year before. On this basis, in the past, from 5 to 16 component societies were carried in the 100% column in the Official List. This year, for the first time in our history, every one of the 21 component societies was 100% paid up, was so far as the State Society is concerned, when we went to press with the Official List in April. These figures indicate a rapidly increasing interest in our State Society, and there must be a reason. I believe the increased numbers are largely due to greater activity of the membership committees in the various component societies, but somewhere the seed must have been sown to permit the harvest. Possibly the little Blue Book issued from my office last winter, on "Membership in the Medical Society of New Jersey, Is It Worth the Price?" may have had some influence. Possibly it is due to the excellence of our State Medical Journal which has become so deservedly popular with the rank and file of our physicians. Our extended Post-Graduate Medical Education Courses have been a factor. The favorable impressions made upon the legislature, the State Departments, especially the Department of Education, and upon the general public, have also produced their effects. Popularity of the different forms of insurance offered by our society and the protection thus thrown around the profession is another decided factor. It may be partly because the officers and employees of the State Society are constantly in close touch with the economic problems and movements affecting the profession and which are discussed at almost every component society meeting. It may well be that our physicians are aroused to the necessity of studying these problems more carefully and that they welcome the opportunity for discussing them at the county society meetings. Certainly the interest

shown in the experimental Councilor District Meetings has had a marked effect and we predict for such future meetings a very influential part in the study of the problems of organized medicine. The result of the Periodic Health Examination and Antidiphtheria Campaigns, which we estimate have added at least \$700,000 to the income of the profession, has also been a favorable factor. Whatever it has been, you must each decide for yourselves, but your officers, looking out from behind the ranks, are deeply gratified by these evidences of an interest and coöperation such as the society has not seen in many years.

As usual, we have many problems pressing for solution. Those relating to our Charter, the legality of the election of officers and committees, the rights of members and of the component societies, have been cleared up entirely, as will be indicated in the report of the special committee appointed by the Board of Trustees. Further study and action regarding administration of the Workman's Compensation Act, the complications arising in Industrial Medicine, the financial support of hospitals, the necessity for amending our Medical Practice Act so as to provide for a "Grievance Committee", before which both the profession and the laity may lodge complaints against physicians, will aid materially in the house cleaning it is necessary to perform. "Fee-splitting", "case-lifting", the open versus the closed hospital, are all vastly important subjects to which your attention is directed in the hope that this society may work out suitable solutions.

The Workman's Compensation Act will continue under observation of the Special Advisory Committee appointed by the Commissioner of Labor for some months yet before it can be properly amended and codified. If this society has any amendments to propose, such suggestions should be sent to me in writing prior to October 1, 1931, when we again go into session. A study of this Act and an endeavor to bring the profession into a proper state of mind as to its provisions and their application will be made one of the subjects for discussion before the component societies during the coming year.

Industrial Medicine has at least 2 important phases which must be cleared up either by this society or by the county societies acting at our request. I refer to "contract practice" and "case-lifting". Mercer County Medical Society has already taken definite action in regard to contract practice. In that county, any physician who engages in any form of contract practice must submit his contract to the component society for its approval if he wishes to obtain or retain membership in the county society. "Case-lifting" has been settled by the Essex County Medical Society. Hereafter, in that county, any physician "lifting" a case, whether by instruction from an Insurance Carrier or not, will have his status as a desirable member of the County Medical Society investigated by the Council. If he is found guilty of case-lifting he may be read out of the society.

If it is decided that these matters relative to Industrial Medicine shall be acted upon by this State Society, I would recommend that they be referred to a special committee on Constitution and By-Laws to draft suitable amendments to cover the problems.

It has been called to my attention that certain individuals in our State Medical Society are accusing me of being an advocate of *state medicine*. Whoever is doing this is guilty of *deliberate misstatement of fact*, and while this phrase is couched in parliamentary language you are at

liberty to construe it in any vernacular you wish. The ideas which I have presented on this subject at many component society meetings have been so clearly and definitely stated that any misunderstanding of their purport must be intentional. If these critics would only use their intellect and do some fair-minded, basic thinking, in an analysis of any reference to the subject made by me in public or private, they would be compelled to admit that my only object in discussing this matter has been to have our profession prepare itself to deal with a question that is being gravely considered in almost every other State Medical Society in America. My frank address before your Conference of Secretaries of Component Societies last fall was so favorably received that they spontaneously voted to bring in some recommendations referable to it today.

In the opinion of your Secretary, this society should appoint a representative committee, with a sufficient budget of money, and given 5 years, if necessary, to make a comprehensive study of National Health Insurance. This subject is demanding attention in these United States. And if, and when, we are called upon to face the proposition, *etc.*, and by this I mean the entire medical profession of the nation, should be able to present to the government or governments definite, concrete, well-thought-out plans for the protection and preservation of our profession. A study of all the laws in effect in other countries, and especially those in force in Canada, of the social and economic conditions of the profession, of the effects of such legislation on both the laity and the profession, and a study of the growing tendency toward National Health Insurance should be made and recorded.

Your Secretary neither believes in nor is he an advocate of *state medicine*. He does, however, believe in such study as may be necessary, and the recommendation of such alterations in the administration of medical relief as will preserve the *individual aspect of medicine* and promote harmony between the profession and the public. He believes that the inroads being made should be fought by the profession acting as a united body; but such united thought and action cannot be secured without a comprehensive study of all facts bearing on the different aspects of the subject.

Some attempt should be made by our profession to have the Federal Government change the policy of giving war veterans medical and surgical attention in diseases or accidents not acquired in service. The present policy is in direct competition with private practice. If the Federal Government feels constrained to pay for such treatments, means should be provided by which the veterans could engage and pay for the services of private physicians. I wonder how many of you are aware of a new aspect of this problem coming to our attention during the past 10 days? We have over 4,000,000 veterans in the United States. They are given free medical, surgical and reconstructive treatment by a grateful government. Immense hospitals are being erected all over the country, to be devoted solely to their care. It is now being considered by the veterans, to request the government to *extend this care to the wives and children of veterans*. I do not take off my hat to any of you in a deep sense of gratitude to our soldiers for what they did for their country. But I would remind you that the United States of America is spending more money in the relief of veterans than all the other nations that were engaged in the Great

War. Not only this, but Calvin Coolidge reminds us that since 1880, that is during the past 50 years, *this country alone* has done more than all other countries on earth, *all put together, in all history*, for the care of its veterans. And the history of the Civil War will show us that this enormous expenditure will continue for 100 years. We must not allow sympathy and gratitude to be turned into political capital. Just as the bonus measure was passed by Congress largely because of its political potentialities, so this new measure, if presented to Congress, may be carried into effect.

If the 4,000,000 veterans, 14 years after the war, are married it will mean 8,000,000 dependents. If the average family of these veterans consists of only 2 children it will mean 16,000,000 people given free medical care at the expense of the federal government. And these people as a class pay very little in the nature of income taxes. Would the care of these 16,000,000 people,  $\frac{1}{5}$  of our total population, and the necessary increase of the 16% of physicians already in government employ, increase the trend to *state medicine*? You must answer for yourselves. There are exactly 16,000,000 being cared for now under the panel system in Great Britain. I endorse the advice of one of the leaders of medical thought in Pennsylvania that the medical, educational, sociologic and political influences of the 150,000 physicians in this country should be exerted in an effort to defeat this undermining of American character, thrift, independence, moral responsibility and civic pride. We must not sit supinely by, with folded hands, while this effort is being made to undermine our social and economic structure.

The Grim Reaper has this year carried 40 of our members to the Great Beyond. A brief reference should be made to some of them. Dr. W. J. Sullivan, of Bergen, was a Permanent Delegate to this body for many years and a familiar face and figure in our deliberations. Dr. Benjamin Dowling, of Camden, put out to sea at the ripe age of 78. He was probably the father of artesian wells in New Jersey. In 1866, through his personal efforts, the city of Camden sunk artesian wells for its entire potable water supply. Dr. Henry H. Davis, of Camden County, was a leader in educational work in the state and a member of our Legislative Committee for many years. The life history of Dr. John H. Moore is written all over Cumberland County. He was an intellectual genius and a Doctor of the Old School. Dr. Jean F. Wolfs was one of Newark's leading surgeons and was carried off at a comparatively early age by carcinoma of the pancreas. Dr. George W. Lawrence, of Ocean, Dr. Benjamin V. Hedges and Dr. Ellis W. Hedges, of Union, were active members of this organization and leaders of medical thought in their respective communities. Dr. L. Cook Osmun, a member of our Board of Trustees, was one of the most prominent members of our profession west of Morristown. The passing of Dr. Gordon K. Dickinson, President of this society in 1919, for 15 years one of our valued Trustees, the first President of the New Jersey Association for the Relief and Prevention of Tuberculosis, the second President of the Academy of Medicine of Northern New Jersey, surgeon, philosopher, writer, friend and counselor to the members of this society for half a century, was the greatest loss this association has sustained in many years. The news has just reached us of the death of Dr. James Hunter, Jr., of Gloucester. Dr. Hunter was President of this society in 1922. He was a member of our Board



of Trustees for 15 years. A man with ability far above the average, a sterling character, a keen intellect, a devotion to our Medical Society that has seldom been equalled in the long years of its existence, the first leading spirit in the period of renaissance through which we have been passing in this organization during the past 10 years—his loss is irreparable.

I would direct your attention to the fact that complications and unpleasant situations are arising because some of the secretaries of component societies are not observing Section 3, Chapter X, of our By-Laws which provides that "When a physician applies for membership or an application is made to be received on transfer, the secretary of the component society shall forward his name and address to the Biographic Department of the American Medical Association for such information as may be on file relative to his record. Printed forms will be supplied by the Secretary of this society. After the adoption of these By-Laws no new member shall be enrolled or accepted on transfer until this provision has been carried into effect."

Your attention is directed to the efforts of your officers to have the Diphtheria Prevention Committees, that were set up in every component society during our recent campaign, continue to administer toxin-antitoxin to the children of pre-school age. There is a determined effort being made by Parent-Teacher Associations, Boards of Health and social welfare groups to have this work completed. If you will not carry this into effect, rest assured that it will be done over your heads. The name and address of every child coming into school age can be obtained in almost every county from the Parent-Teacher Association. The people are looking to us to see that diphtheria is wiped off the map of New Jersey. Will you sulk in your offices while this work is being done by others or will you give the co-operation so earnestly requested, take an active part in the campaign, and see that the average parent, who is usually willing, has toxin-antitoxin administered to the pre-school child? This is an opportunity to salvage a large portion of medical work legitimately yours, which certain groups are determined shall be done at the expense of the county or municipality. Hudson County Medical Society is carrying on a very active campaign this year and I trust that some of the members of their delegation will refer to the plans in operation.

Respectfully submitted,

J. B. Morrison, M.D.,  
Secretary.

*President Sommer:* You have heard the Recording Secretary's very eloquent report on conditions of medicine in New Jersey today and something about its greater problems. What is your pleasure, gentlemen?

*Dr. B. T. D. Schwarz:* I move it be accepted.

The motion was seconded.

*President Sommer:* What about the recommendations embodied therein?

*Dr. Schwarz:* I move that they be referred to the special Committee on Business.

The question was put and the motion carried.

*President Sommer:* We shall now hear the report of the Judicial Council by Dr. Beling.

*Dr. C. C. Beling* presented his prepared report as follows:

### Report of the Judicial Council

1930-1931

There have been 2 meetings of the Judicial Council during the past year. A number of minor matters have been referred to the Council, and all have been carefully considered and disposed of. Nothing of serious consequence has arisen during the year.

A question regarding the legality of election of a physician to a Component County Society was referred to the Council by the Board of Trustees. This matter was taken up by the Council and a report submitted to the Board of Trustees.

Since the Medical Defense Act of the State Society was repealed, the Judicial Council has not had any malpractice cases referred for consideration. This has left very little work for the Councilors to do. They visit their county societies and largely play the rôle of silent spectators. It is a duty of the Council to effect a close coöperation between the County Societies and the State Society. Serious thought has been given as to how the Judicial Council could best function in this respect.

Three years ago Dr. Aldrich Crowe, Councilor for the Fifth District, conceived the idea of a Councilor District Meeting and brought together the component societies of his district. This plan was well received and has since been put into operation in several of the other Councilor Districts. Last year meetings were held in the first, second, fourth and fifth districts.

The State Society has not given any official recognition to the plan. The meetings held during the past year proved their value in bringing about a closer coöperation among societies. It is the opinion of the Judicial Council that the State Society should take official recognition of these efforts and require each Councilor to organize and hold 1 meeting each year.

The Judicial Council makes the following recommendations:

(1) Adoption of a uniform application blank for membership, to be used by all component societies.

(2) The State Society shall require each Councilor to organize and hold at least 1 joint meeting each year of all the county societies in his district.

Attached hereto are the individual Councilor reports.

Respectfully submitted,

Christopher C. Beling,  
Chairman.

### FIRST DISTRICT

During the past year all the component societies of this district were visited. There has been much activity in those societies and the scientific work has been of a high standard.

A joint meeting of the district societies was held in Newark, the Essex County Medical Society having given up one of its meeting dates and made the arrangements.

A full report of that meeting has already been published in the Journal, and all other activities of the county societies have already been recorded in the Journal.

Christopher C. Beling,  
Councilor First District.

## SECOND DISTRICT

It is a pleasure to report that my first year as Councilor has witnessed a noteworthy growth of activity throughout the district.

I have attended meetings in Hudson, Passaic, and Sussex Counties besides my own (Bergen) and have derived a tremendous amount of enjoyment in meeting the men of other communities and in attending their meetings.

Sussex has a virile group, progressive about their organization work even though a rural community. Hudson is exceedingly active and well guided. Passaic has held successful meetings, carried out a well attended post-graduate course, but did not get thoroughly interested in our Councilor District Meeting. Bergen was busy as usual.

The innovation of the year has been our Councilor District gatherings. A preliminary meeting was held at Jersey City, in November, a second in Paterson, in February, and a successful dinner of the officers and state society delegates in Hackensack, of which a detailed report follows:

Thirty-seven officers and delegates of the 4 societies met at the Oritani Club, Hackensack, for dinner on April 29. Dr. Harry Perlberg presided. The meeting developed an enthusiastic and coöperative spirit, and considered and acted upon several problems which are pressing upon the profession. Dr. Coleman, of Sussex, raised the first question—Shall the physicians try in 1932 to obtain an amendment to the hospital lien law to include doctors and nurses? It was voted that such action should be recommended to the State Society. Dr. Waters, of Hudson, presented a detailed and carefully thought out plan for accrediting specialists; this was approved for reference to the State Society's Welfare Committee.

Dr. Morrow, of Bergen, spoke on the problem of supervising public health nursing. After Dr. Snedecor's discussion of publicity problems, it was voted that the State Society be urged to form a committee for the promotion and supervision of county medical society public relations. Better supervision over medical charity was explained by Dr. Perlberg. He was followed by Dr. Haskin, also of Jersey City, who gave a detailed report of the new Poor Law which will react to the benefit of physicians.

Dr. Wilbur, of Franklin, suggested that as soon as a large percentage of children in the schools have received toxin-antitoxin it should be made compulsory to have children so immunized by their family physicians before admission to school. Dr. Hall spoke on the need for a campaign on the part of physicians for the pre-school examinations.

The recommendations from that meeting will be carried to the House of Delegates.

Spencer T. Snedecor,  
Councilor Second District.

## THIRD DISTRICT

The Councilor for the Third District reports that conditions in general among his component societies are quite satisfactory.

Regular meetings have been held and the scientific standards have been well maintained. Each county has been visited.

Frank G. Scammell,  
Councilor Third District.

## FOURTH DISTRICT

I herewith submit my report for the Fourth Judicial District for the past year:

There have been no damage suits during the year. The meetings of each county society have been well attended, and the papers have been very interesting and helpful. Our District Councilor's meeting was held at the Lakehurst Naval Station, on Friday, May 1, upon the invitation of the Commanding Officer and Commander Davies. This was a special meeting, and not the date of any regular meeting of the county societies.

From 4-6 p. m., opportunity was given to visit and inspect the Los Angeles. At 6.30, a regular Navy Dinner was served in the galley, which was thoroughly enjoyed by all. The meeting was called to order at 7.30 for the scientific program, consisting of the following papers:

Medical Economics, Dr. S. T. Snedecor.

Medical Aspects of Aviation, Commander F. Ceres.

Functional Disorders of Sight, Lieut. Commander E. C. Ebert.

Toxic Amblyopia, Lieut. Commander Joel White.

Liver Function Tests and Their Clinical Significance, Lieut. Commander Paul Richmond.

Production of Sterile Larvae for the Baer Treatment of Osteomyelitis, Lieut. Commander Franklin Murdock.

There were 163 present. The Committee of Arrangements included Drs. Buzby, Featherston, Woodhouse, Tracy and Newcomb. We are certainly very much indebted to Commander Davies for the most interesting visit and a very fine scientific program.

Marcus W. Newcomb,  
Councilor Fourth District.

## FIFTH DISTRICT

This year the duties of the Councilor have not been very onerous, but exceedingly pleasant. The third annual joint meeting of the county societies of this district was held in Atlantic City, April 10, and was highly successful. Salem County requested the privilege of acting as host in 1932.

All of our county societies are in good condition, and their regular programs are of high caliber.

It has been a pleasure to work with the Chairman and other members of the Judicial Council.

Fraternally yours,

Aldrich C. Crowe,  
Councilor Fifth District.

*President Sommer:* You have heard the report of the Judicial Council. What is your pleasure?

*Member:* I move that it be accepted and the recommendations therein contained be referred to the Business Committee.

The motion was seconded and carried.

*President Sommer:* We shall now listen to the report of the Treasurer, Dr. Marsh.

*Dr. Elias J. Marsh:* Mr. President, on account of the early date of this meeting, it was impossible to publish the report of the Treasurer in advance, in the Journal for June, as has been the custom for several years past, but the report has been printed and distributed through this house and there are extra copies



here available for anybody who wishes one. I think it doesn't require any comment from me except to point out, in the first place, that the balance at the bottom of the general account simply means the cash balance on hand at the present time and not the balance for the year. That balance, of course, is already appropriated to run the society from now till the first of January, something over \$22,000 of it, so it gives us only about \$2000 as an actual balance. The statement of the operating net balance for the year is found at the bottom of the sheet.

Aside from that, I would add that the item of reserve, \$3000, was transferred last night by the Trustees to the Permanent Fund.

Here is the copy of the report for the record, with an attached financial statement of the Committee on Program and Arrangements for the year ending last June.

### Report of Treasurer

1931

#### PERMANENT FUND

DR.	
June 1, 1930—	
2 M 1st Liberty Loan 3½ % bonds..	\$2000.00
4 M 4th Liberty Loan 4¼ % bonds..	4000.00
Mortgage Certificates, Investors' Title and Mortgage Guarantee Company	2700.00
June 14—	
Cash from Reserve .....	3000.00
	<hr/>
	\$11,700.00

CR.	
May 31, 1931—	
2 M 1st Liberty Loan 3½ % bonds..	\$2000.00
4 M 4th Liberty Loan 4¼ % bonds..	4000.00
Mortgage Certificates, Investors' Title and Mortgage Guarantee Company	2700.00
Mortgage Certificates, Trenton Mortgage and Title Guarantee Company	3000.00
	<hr/>
	\$11,700.00

#### GENERAL ACCOUNT

##### RECEIPTS

Balance, June 1, 1930 .....	\$17,947.52
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##### Assessments—

Atlantic .....	\$ 1815
Bergen .....	2880
Burlington .....	765
Camden .....	2040
Cape May .....	375
Cumberland .....	750
Essex .....	11995
Gloucester .....	480
Hudson .....	6570
Hunterdon .....	390
Mercer .....	2205
Middlesex .....	1785
Monmouth .....	1330
Morris .....	1245

Ocean .....	225
Passaic .....	3360
Salem .....	225
Somerset .....	660
Sussex .....	315
Union .....	3640
Warren .....	375
	<hr/>
	43,425.00
Interest .....	914.57
Publication .....	8,850.46
Health charts sold .....	5.20
	<hr/>
	\$71,142.75

##### PAYMENTS

For Publication Committee .....	\$14,748.30
" Publication Special clerical .....	100.00
" Welfare Committee .....	672.38
" Credentials Committee .....	394.02
" Executive Department:	
Salaries .....	\$14,000.00
Travel .....	2,645.82
Office .....	3,641.49
	<hr/>
	20,287.31
" Treasurer's Office .....	65.00
" Secretary's Office:	
Salary .....	\$ 1500.00
Expenses .....	2196.91
	<hr/>
	3696.91
" Delegates to A. M. A., R. R. fares..	187.28
" Printing and Stationery .....	1884.81
" Legal Services .....	988.47
" Tristate Conference .....	126.62
" County Secretaries' Conference .....	150.90
" Expenses of Guests, 1930 Meeting ..	249.62
" Flowers, Dr. Dickinson's Funeral..	25.00
" Subscription, N. J. Legislative News	25.00
" Refund to Dr. Hillegas .....	20.00
Reserve .....	3000.00
Balance, May 31, 1931 .....	24,521.13
	<hr/>
	\$71,142.75

##### RECONCILIATION WITH BUDGET

Expected Income .....	\$48,450.00
Actual Income .....	53,195.23
Appropriations .....	48,450.00
Expenditures .....	46,621.62
Operating Net Balance .....	5,573.61

Respectfully submitted,

E. J. Marsh,  
Treasurer

Audited and found correct:

George N. J. Sommer  
M. W. Reddan  
James S. Green

#### Report of Receipts and Expenditures, Committee on Program and Arrangements

From July 1, 1929, to June 30, 1930

##### Receipts—

Received from exhibitors .....	\$1440.00
Received from Program Advertisers	1050.00

Total .....

##### Expenditures—

(See itemized list attached .....

	\$ 435.55
Less 20% to Secretary of the Committee	445.50

## Itemized List of Expenditures

To Stacy Trent Hotel, Meeting Room ..\$	5.00
To Stenographer, as needed .....	94.50
To Traveling expenses, Phila., Newark and New York (re: Exhibitors and Program Advertisers) .....	86.75
To Frank Imhoff, Signs .....	91.50
To John Brunton Studios, Exhibit Booths .....	248.00
To Haddon Hall, Carpenter and Electrician Service .....	38.47
To Haddon Hall, Shelving and Material ..	20.00
To Haddon Hall, Motion Picture Operators 15 @ \$5.00 .....	75.00
To Haddon Hall, Meals, Phone Calls, Wires, Expressage, Dr. and Mrs. Ridpath, Ladies' Card Party .....	178.82
To Rental Motion Picture Screen .....	10.00
To Watchman .....	25.00
To Shill Rolling Chair Co. ....	186.00
To Prizes, Ladies' Card Party (Foster Shop) .....	45.00
To Luzenbug Vaudeville Agency (talent, orchestra) .....	146.50
To Tips, Taxis, Telegrams, Messengers, Miscellaneous .....	39.50
To Budin Press, Printing Program ....	434.85
To Budin Press, Printing Chair Ride, Banquet Tickets .....	10.50
To Charles Hewett, Drawing Exhibit Floor Plan .....	20.00
To Amusement Publishing Co., Making Cut of Floor Plan .....	20.36
To Amusement Publishing Co., Printing Announcements .....	16.20
To Commission to P. Lustgarten on Program Ads. ....	262.50
.....	\$2054.45

Submitted by

W. D. Olmstead,  
Secretary to Committee.

*President Sommer:* You have heard the report of the Treasurer.

*Member:* I move that it be accepted and referred to the proper committee.

*President Sommer:* And referred to the Board of Trustees.

The motion was seconded and carried.

*President Sommer:* The Committee on Finance and Budget, Dr. North.

*Dr. Harry R. North:* The Committee on Finance and Budget met last night. We had a very lengthy meeting; in fact, it was almost midnight when we finished, and we very earnestly tried to reduce the expenditures for the ensuing year but finally decided it was not feasible, and we are presenting to you the budget for 1931-1932 for your approval or disapproval:

Publication Committee .....	\$15,000
Welfare Committee .....	750
Credentials Committee .....	400
Executive Salaries .....	14,000
Executive Office and Rent .....	3,650
Executive Travel Expense .....	2,000
Treasurer .....	100
Secretary's Salary .....	1,500
Secretary's Expenses .....	2,200
Legal Expenses .....	1,000

Printing and Stationery .....	2,000
A. M. A. Delegates (a reduction from last year) .....	100
Tristate Conference .....	150
Conference of County Society Secretaries and Reporters .....	150
Contingent and Miscellaneous .....	2,500

The total represents about the same amount that was in the budget last year. The committee tried to reduce this but we just feel we can't do it.

The suggestion was brought up to the committee, however, that there might be a possibility of reducing the per capita assessment \$1 if the House of Delegates so sees fit. However, your committee recommends the same assessment of \$15. I think we all feel that we should have some reserve. If we take the figures, 2706 members at \$15, that gives us an anticipated revenue of \$40,590. We probably shall get \$850 for interest and the Publication Committee will probably return \$8500, which gives us an income of \$50,000 approximately. Our expenses are \$45,500. That does leave something over \$4000, but bear in mind that we have taken out that reserve of \$3000. I feel, and I think the committee feels, we should have that \$4000 as reserve and certainly \$1 less on the assessment isn't going to make very much difference to the average doctor, probably 4 or 5 cigars. (Applause.)

*President Sommer:* You have heard the report of the Budget and Finance Committee.

*Member:* I move that it be approved and adopted.

The motion was seconded and carried.

*President Sommer:* This report is referred to the Board of Trustees for further consideration.

Now we shall hear the report of the Board of Trustees, Dr. McBride, Chairman.

## Report of the Board of Trustees

June 3, 1931.

To the House of Delegates of the  
Medical Society of New Jersey.

Gentlemen: It is my sad duty to report the death of Dr. Hunter, the Secretary of our Board, just as he was preparing to come to this convention. The report I shall read to you is in the main that which he had prepared to deliver in person.

After the close of the last Annual Meeting of the State Society, the newly elected Board of Trustees met for the purpose of organizing, and elected, as Chairman, Dr. Andrew F. McBride, and, as Secretary, Dr. James Hunter, Jr.

The Chairman called for the election of 3 members from the Board to serve on the Committee on Finance and Budget, and the following members were chosen: Dr. James S. Green, for the 6 year term; Dr. James Hunter, Jr., for the 4 year term; and Dr. Louis Cook Osmun, for the 2 year term.

A special committee, consisting of Drs. Sommer,



Morrison, Reddan, Herrman and Disbrow, appointed to consider the recommendation made by the Nominating Committee, that the next Annual Meeting of the Medical Society of New Jersey be held at Asbury Park, investigated the facilities and accommodations for such meeting, and later approved the recommendations; whereupon the Trustees voted to hold said meeting at Asbury Park, with the Berkeley-Carteret Hotel as headquarters.

At a later meeting, it became necessary to change the date of meeting and settle upon the period of June 2 to 5 as the time.

A question having been raised as to the eligibility of members of the society, but not at the time members of the House of Delegates, for election to office within the society, that question was submitted to a special committee for consideration, and the committee was authorized to employ counsel if necessary, and was requested to advise what action, if any, is required with reference to changes in the Charter or in the Constitution and By-Laws. That committee reported to the Trustees last evening, June 2, as follows:

Report of Special Committee appointed by the Board of Trustees, April 26, 1931, to consider and advise concerning amending the Charter of the Medical Society of New Jersey.

Your committee was fortunate in securing the services of Mr. Albert C. Wall, formerly counsel to the society, to whom various questions concerning the Charter and its interpretation were submitted, together with all material in our hands bearing on the subject.

In the appended opinion submitted by Mr. Wall, May 19, 1931, and his letter of May 12, 1931, the questions propounded and the answers thereto are clearly set forth. We recommend that the counsel's opinion be accepted.

Inasmuch as this is of interest and importance to the society as a whole, it is recommended that a brief summary of Mr. Wall's opinion be included in the annual report of the Board of Trustees.

Respectfully submitted,

Frederic J. Quigley  
J. B. Morrison  
James S. Green  
Aldrich C. Crowe

#### Summary of the Report of the Special Committee to Study the Charter

Questions have arisen from time to time regarding the Charter of the Medical Society of New Jersey, which resolved themselves into the proposition whether the present Charter was liberal and comprehensive enough to permit this society to operate along truly democratic lines.

The matter was considered by the Trustees to be of sufficient importance to warrant the appointment of a special committee to study the subject and make suitable recommendations. The committee, consisting of Drs. Quigley, Morrison, Lathrope, Green, Scammell and Crowe, was authorized to employ counsel, and was fortunate in securing the services of Mr. Albert C. Wall, formerly counsel to the society, a recognized outstanding corporation lawyer.

The following are the specific questions submitted to counsel and a digest of his answers thereto:

Question No. 1. Is it necessary to amend the Charter to make all members of component societies members of the Medical Society of New

Jersey?—Answer: "No. Members of the component societies are now, by virtue of the Constitution, members of the State Society. \* \* \* The Charter members, i.e., Officers, Fellows and Delegates, derive their status as members from the basic law—Act of 1864. The members at large derive their status as members from the action of the Charter members in constituting members at large members of the society. The Charter members do this by virtue of the large powers granted under the original act."

Question No. 2. Must the standing committees be selected from the Delegates, as the Charter stands?—Answer: "Not necessarily. The Charter does not mention committees, and under the powers in Section 3 the corporation can set up such committees as it pleases composed as it sees fit." In other words, members of standing committees may be selected either wholly or in part from the delegates or the membership at large.

Question No. 3. Involves the alleged ambiguity of the language of the Charter concerning officers, and particularly the phrase "independently of the authority of delegation."—Counsel's answer here, in effect, is that officers may be elected from the delegates or from the membership at large; and by virtue of their offices, are members of the society (the corporate body) independently of any question of delegation.

Mr. Wall, in conference with members of this committee, stated that he felt the present Charter was sufficiently broad, to achieve, from time to time, whatever changes were desired by the society, through the medium of the Constitution and By-Laws.

We are happy to make this report. It proves that our predecessors in the society, responsible for the enactment of this Charter into law in 1866, were men of judgment and vision. May we pay this small tribute to them—They builded better than *we* knew.

F. J. Quigley, M.D.,  
Chairman.

The committee's report was, of course, adopted.

*Dr. McBride:* I have been asked by the President of the society to read the opinion of Mr. Wall in full, so that you may be acquainted with everything connected with it and that the records of the society be kept straight.

#### In Reference to the Proposed Amendment of Charter of Medical Society of New Jersey

May 12, 1931.

Dr. Frederic J. Quigley,  
4622 Hudson Boulevard,  
Union City, N. J.

Dear Dr. Quigley: When do you desire to have a conference on the above matter? Incidentally, I notice that a copy of the act you sent me differs in a number of particulars from the act as printed in the official laws of 1864. The act was entitled: "An Act to reorganize the Medical Society of New Jersey". It was approved March 14, 1864, and is found on page 250 of the laws of that year. It took effect January 4, 1866. One of the criticisms of the act in Dr. Lathrope's letter is the use of the word "hereinafter" in Section 1 of the act. This criticism is not justifiable because the act as printed in the official laws uses the word "hereafter" so that the sentence reads:

"which under the authority of the State Society may be hereafter instituted."

In Section 2 there are a number of variations one of which is that the Latin phrase *ad eundem* appears in the original act as *ad cardem*. The proviso of Section 2 reads as follows:

"Provided that this act shall not be so construed as to prevent any county or district society from admitting to membership any respectable practitioner who shall have previously to the passage of this act received a degree of doctor of medicine from any college or university recognized by or in affiliation with the body known as The American Medical Association."

In the original act the word "annual" precedes the word "income" 3 lines from the bottom of Section 3.

Nor do I see that there is any confusion as to the meaning of the phrase "independently of the authority of delegation" as found in Section 1. The whole phrase means that the officers for the time being, i.e., at the time of the passage of the act and thereafter, shall be *ex officio* members of the said society whether such officers are delegates or not, and the society, under the provisions of Paragraph 3 which authorizes it to adopt such rules and regulations for the due management of the concerns of this and the several district societies as may be deemed necessary, has ample power by its Constitution or By-Laws to provide the means by which the officers of the society shall be chosen.

Obviously, if you can achieve the changes you want through the medium of the Constitution and By-Laws, it would be unwise to seek amendment of the Charter by act of the Legislature. The Legislature is a place of danger and if you yourselves seek amendment of the Charter, you cannot tell what other amendments will be proposed through the instance of theorists within the Legislature or the highly competitive interests which may animate some member of the Legislature.

It would be very natural for a sincere critic of the act desirous of doing away with the provisions in special charters which may be out of keeping with the uniform acts in reference to the medical profession, to propose taking away from the society the authority to confer the degree of Doctor of Medicine, and I should think this power as it now exists might well be worth while preserving from the possible action of a Legislature one of whose predecessors was guilty of the absurd definition of "chiropractor".

Another point which should be borne in mind is that the courts do not assume the authority to govern the internal affairs of such an association as the Medical Society or to interfere with it unless a property right is involved. Consequently, the large question is whether you cannot accomplish all you desire through changes in the Constitution and By-Laws.

I am not attempting to cover the whole field of your questions, but rather to preserve in convenient form the notions that have occurred to me up to date.

I note that Mr. Colie's opinion was dated May 14, 1929, and he refers therein to your letter to Dr. Wilson of April 6, 1929, and Mr. Colie's letter of April 22, 1927, addressed to the Medical Society; but as the copy of the charter, etc., which you sent me was adopted in June, 1929,

I take it that the correspondence before that date would throw no light on the matter. Is this correct?

I am sending you an extra copy of this letter.

Yours very truly,

Albert C. Wall.

### New Jersey Medical Society

#### Questions:

(1) Is it necessary to amend the Charter in order to make all members of component societies members of the Medical Society of New Jersey?

*Answer.* No. Members of the component societies are now, by virtue of the Constitution, members of the State Society. Their membership differs from the membership of what may be called the Charter members not in the fact of their being members but in their title to membership. The Charter members derive their status as members from the basic law—the Act of 1864. The members at large derive their status as members from the action of the Charter members in constituting members at large members of the society. The Charter members do this by virtue of the large powers granted under the original act. The delegates therefore derive their title through the act. Members at large derive their title through the action of the Charter members as evidenced by the Constitution and By-Laws. The Charter members and members at large differ in eligibility for certain services. Is it not reasonable that they should?

The delegates represent the choice of the component societies. They have been honored by election from the body of the component societies; whereas members at large have merely been elected from the body of the profession to the component societies.

The framers of the Medical Society had in mind a complete sovereignty. The delegates were like representatives of the local societies which had been set up by the State Society prior to 1864. The members of the local societies were like citizens to be accorded such power as the Charter members gave or withheld by means of a Constitution and By-Laws.

The Legislature had to deal with some entity in existence; consequently it set up the delegates, the officers, the ex-presidents. It made this the body corporate. The Legislature followed precedent. Corporations grew out of the ancient charters given by kings to their favorites just as Charles II. gave New Jersey to his brother and his brother gave it to Lords Berkeley and Carteret, and in those charters powers to set up government were given. Other instances are the Hudson Bay and East India Companies.

The Act of 1864 does not attempt to deal with the qualifications of Charter members or define their powers beyond giving the power to confer the degree of M.D. and conferring the very broad powers purposely not defined for the management of the concerns of the state and local societies.

As the matter stands, if the Charter members are willing, the most profound changes may be embodied in a new constitution.

(2) If, however, it is desired to amend the Charter, should the amendment be specific like the Morrison amendment, or should it be a general transfer of powers, the definition of which is to be found in the Constitution, i.e., the Quigley amendment?

The amendments represent antagonistic theories. The Morrison amendment represents distrust of



the mass and belief in the chosen representatives of the mass. It also recognizes the sentimental dignity which comes from being incorporated under a special act. It rests also on the security that comes from the provisions of the present act in that the Charter members are less likely to go bolshevik than the whole body of the society at a meeting assembled. Delays and difficulties in achieving change have their advantage in compelling study of the pending problems and initiating compromises.

The Quigley amendment makes the society responsive.

Which is better? I would distrust my own answer. It is a question of temperament. Are you a believer in the equality of man, or are you convinced that the herd needs leadership?

(3) Another question is, must the standing committees be elected from the delegates as the Charter stands?

Not necessarily. The Charter does not mention committees, and under the powers in Section 3 the corporation can set up such committees as it pleases composed as it sees fit. I don't agree with Mr. Colie's opinion that the committees must be formed from the corporate body. In his letter to Dr. Quigley of May 14, 1929, on the third page he says that the society as a corporation "must function in action by committees of its corporate membership precisely as ecclesiastic and mercantile corporations act by committees of their board of directors or board of trustees. Such committees alone can, within the authority delegated to them by the Constitution and By-Laws, act for and bind the corporation".

It seems to me a question of agency and the controversy arose sharply with reference to executive committees formed from directorates. Formerly there was some doubt as to whether the board might delegate its powers to an executive committee. In matters involving discretion there are decisions to the effect that the directors cannot delegate that discretion, but the clear weight of authority holds that the powers of a board of directors may be delegated to an executive committee of that board and the acts and contracts of such a committee may be made binding on the corporation.

Now in your case the delegates could not transfer to others the power to confer the degree of Doctor of Medicine and could not transfer to others their power to adopt rules and regulations.

(4) Another question involves the alleged ambiguity of the language of the Charter concerning officers.

Mr. Colie had no doubt of the meaning of the phrase in Section 1 of the Charter, viz: "independently of the authority of delegation". He considered it equivalent to "without the necessity of delegation". I would reach the same result by taking the phrase literally. I can see no ambiguity in it. The Legislature in continuing the body corporate naturally preserves the representation of the local societies through means of delegates. It made the officers members of the society by virtue of their offices independently of any question of delegation. The use of this language gave good title to the officers however they became officers; but clearly it does not mean that the officers must be chosen outside the delegates.

My conclusion is that if the members of the society are generally satisfied with the present

status of the society, it is unnecessary to amend the Charter and it would certainly be inexpedient to propose any amendment to the Legislature unless the necessity for the amendment be present.

Yours respectfully,

Albert C. Wall.

It having been brought to the attention of the Trustees that apparently an injustice has been done a member of this society in that he has been adjudged punishable for not reporting a questionable diagnosis of scarlet fever, it was decided to participate in an effort to secure a review of the case by the Supreme Court of New Jersey.

In the death of Dr. Louis Cook Osmun, of Warren County, the Board of Trustees lost one of its youngest members and one who had given promise of being an active and useful officer of the State Society. Dr. Osmun having been also a member of the Finance Committee, to fill that vacancy, Dr. William G. Herrman, of Monmouth County, was elected to serve until this Annual Meeting.

Dr. Herrman presented to the Board a suggestion that an attempt be made to organize within the State Society a special section on Radiology, and he was authorized to ascertain the possibilities in that direction.

At a meeting of the Board, held in Asbury Park, on the evening of June 2, the Treasurer, Dr. Marsh, presented to the Board his annual report concerning the financial condition of the society and it was referred to an Auditing Committee for consideration; which committee later reported that everything was found correct and satisfactory. The details of that report will be presented to you by the Treasurer this morning.

At the same meeting, the Committee on Finance and Budget presented for consideration the report which will likewise be given to you today, and the Trustees endorse the proposition of continuing appropriations as of last year.

The Chairman of the Committee on Publication reported a satisfactory year in relation to publication of the Journal.

All of which is respectfully submitted for the Board of Trustees by

Andrew F. McBride, M.D.,  
Chairman.

*President Sommer:* You have heard the report of the Chairman of the Board of Trustees, what is your pleasure?

*Dr. G. V. Warner:* I move its adoption and that it be spread in full upon the minutes.

The motion was seconded and carried.

*President Sommer:* Before we adjourn, Dr. Warner, of Red Bank, wants to show us an historic document.

*Dr. G. V. Warner:* I just want to show you a copy of the Monmouth County Medical Society Minute Book dating from 1816 to 1885. The minutes are entirely intact and are written in the handwriting of the secretaries of those particular years. It is mighty interesting and anyone who cares to look at it may see it on the Secretary's desk.

The meeting adjourned at 1 o'clock.

*Wednesday Afternoon Session*

June 3, 1931

The Wednesday afternoon session of the House of Delegates convened at 3.05 p. m., with President Sommer in the chair.

*President Sommer:* The first order of business this afternoon is the report of the Field Secretary, Mrs. Taneyhill.

**Report of the Field Secretary for 1930-31**

The fourth year of that part of the educational program of the Medical Society of New Jersey entrusted to the Field Secretary has been marked by 2 outstanding developments: (1) a sustained interest in the health talks offered, and (2) an increasing recognition, on the part of state departments and committees having to do with public health administration, of the coöperation thus made available by the medical profession.

Through Dr. Allen G. Ireland, Director of the Division of Physical and Health Education in the Department of Public Instruction, also State Health Chairman for the Parent-Teacher Association, the schools and Parent-Teacher Associations were opened to us again this year. As foretold in our report of last June, however, no attempt was made to repeat the attainment of the previous year. In fact, Dr. Ireland, in his letter to county superintendents and city principals, asked that a reasonable limit be placed on their requests for our talks. He said, in part: "Since an itinerary of this scope places the speaker under a severe mental and physical strain, it is suggested that no more than 3 talks be arranged for any 1 day. \* \* \* It is further suggested that the speaker's time be used to best advantage by scheduling her for the larger schools and school districts. \* \* \* There is no fee or charge of any kind attached to this service. We are indebted to the Medical Society of New Jersey."

As a further check on a too extensive program, no follow-up to the state department bulletin was used, and we were thus enabled to measure the minimum demand created by our offering of the previous year. Even under these restricting conditions the response was greater than could be met. In fact it could not have been handled at all successfully had it not been for the kind offices of the county superintendents in attending to the worrisome detail accompanying the arranging of county schedules. Not only did they cheerfully—enthusiastically in some cases—allot the time at their disposal to the schools in their jurisdiction, with due regard for time and geography, but they also courteously took over the dovetailing of engagements for city schools, as well as for all and sundry organizations that applied for places on the county programs. Their effective support has been a vital factor in our accomplishment.

It was a matter of keen regret to us that the schedules for Morris and Passaic Counties should have been so badly mutilated this year by a combination of storms and influenza. But to one alone and ill in a hotel in a strange city, this affiliation with the medical profession brought priceless security and comfort in the faithful and generous ministrations of Dr. Andrew F. McBride. Dr. Ireland also sent valuable aid in the person of Miss Lula P. Dilworth, his assistant. Miss Dilworth is a graduate nurse who served during the war in France, going later to Serbia

for a post-war reconstruction period. Not only did she in this instance render assistance in her professional capacity where a "case" was involved, but she also substituted for several engagements with Parent-Teacher Associations in Passaic County, whose programs would otherwise have been seriously disarranged. Only 2 of the 12 dates listed for this county was your secretary, by determined effort, able to fill: one at the Woman's Club of Paterson, where the auxiliary had assembled an audience of over 100 women; the other at the High School in Passaic, where 425 teachers and principals had been called together for the express purpose of hearing your message. Mental Hygiene was the subject that attracted both these groups.

Because of the protracted illness of Mr. Oliver J. Morelock, County Superintendent of Schools, no effort was made on our part to organize a program in Essex County this year, other than the appeal contained in the annual circular letter to all auxiliaries.

The 3 counties which, for local reasons, were unable to respond to our offer last year—Bergen, Camden and Monmouth—came through this year with full schedules. All the remaining counties having accepted the time allotted to them, our field promised to be 100% covered but, as the school term neared its close, the superintendent of Sussex County found the first week in May an unfavorable time for introduction of any extra-curricular matter, so by mutual agreement the date for that county was changed from last place on the 1930-31 schedule to second place on that for 1931-32.

In the 20 counties visited there was presented to the schools during this past year a total of 121 talks, to an audience of 41,710 pupils. Allowing an average of 10 teachers to a school (a low estimate), the number thus reached was approximately 42,970. The largest single school group consisted of 1340 pupils and about 60 teachers.

In the Parent-Teacher Associations we generally find eager and responsive audiences, but the field here is limited to the chance of the regular meeting of the local organization falling within the dates assigned to the county, although in some instances special meetings are called or dates are changed. This year we have been able to appear before 30 of these organizations, with a total attendance of 1945.

A new feature of field activity was introduced last fall through Dr. Ireland's invitation to address the section of Physical and Health Education at each of the 20 counties holding Teachers' Institutes during the month of October. One of these institutes we were unable to reach because of a hitch in transportation due to fog and meadow fires. The subject of Mental Hygiene was, however, presented to 19 of these groups, which included 582 teachers. Among the visitors to these sectional meetings were several of the county superintendents and city principals; also 2 of the assistant commissioners of education.

An important, though necessarily limited contact was made, through Dr. Ireland's department, with the county conferences of nurses, held during the early part of the new year. It proved geographically possible for us to attend 6 of these meetings, where the subject discussed dealt briefly with the early history of the New Jersey Medical Society, its development and present aims, with special reference to the educational work; also the organization and function of the Woman's Auxiliary. Material for this talk was



drawn largely from the booklet prepared by Dr. J. Bennett Morrison, entitled "Membership in the Medical Society of New Jersey—Is It Worth the Price?" In this way our number of auditors was increased by 197, and we trust that understanding and goodwill were also appreciably furthered, as that was the original purpose.

In his circular letter to county superintendents and city and supervising principals, Dr. Ireland called attention to the new talk on Mental Hygiene which, at his suggestion, had been prepared during the summer and added to our previous list. This included "The Story of Toxin-Antitoxin", "Life and Work of Pasteur", and a general health talk which has finally acquired the title of "Your Heritage". The newly prepared talk, as ultimately worked out for the Medical Society, and approved by Drs. Sommer, Morrison, and Reik, deals almost exclusively with the preventive aspect of mental hygiene, and stresses the interdependence of mental and physical health. As most of this preventive effort must be intelligently applied by grown-ups in their contacts with children, this talk was offered only to adults. A lively interest was everywhere manifested in this subject, resulting in its presentation to 83 audiences comprising 6777 individuals. In a number of instances all teachers and principals in a city or rural area were called together to hear this address, and it was the one selected by all Normal Schools. The far reaching effects of such a message to such audiences could never be estimated.

*Summing up, we find our record for the year 1930-31 shows a total of 212 talks to an audience of 48,177.*

While these figures fall somewhat short of last year's totals, they represent an effort to fix the probable maximum of what 1 person can be expected to put through with due regard to the limits of physical endurance, because between these 212 places on our schedule lay 6940 miles of travel, for which the speaker was also the chauffeur in all sorts of weather, day and night.

Even this record was made possible only by the service rendered through the Department of Public Instruction in assuming the bulk of the correspondence entailed. This proved to be such a considerable item that some other provision must now be made for it, and we find ourselves confronted by a choice between 2 alternatives. If it is the society's pleasure to carry out the hope expressed by Dr. Ireland in a letter to Dr. Morrison, that "this fine feature of your educational program be continued and expanded", it will be necessary for the Field Secretary to have stenographic assistance for half a day each week, from September to June. If the society prefers that this position be kept within the compass of one person's time and strength, this can be done by subtracting from the field schedule 1 day each week for office detail. Such procedure would appreciably reduce field coverage, and it is doubtful whether the slight financial saving thus effected would offset the loss of 1/5 of our available contacts. Your secretary asks to be instructed as to the future handling of this matter.

The itinerary for 1931-32, as approved by the Department of Public Instruction and placed in your hands this morning, is made out on a 5-day week basis. In the event that you should decide to curtail this allowance by taking out 1 day for office work, the first date for each county will be 1 day later than appears on this list.

It might be well to note here that official

recommendation by the State Department of Public Instruction does not automatically insure enthusiastic welcome by principals of all schools where it is presented. They will tell you that other speakers offering similar credentials have proved, for one reason or another, disappointing; that they are besieged by representatives from all kinds of organizations seeking a hearing by the student body. Added to that resistance is the fact that health is a difficult subject to sell; it is often impossible even to give it away. Announcement of a health talk on the program of many societies is a signal to some of their members to substitute for that meeting something more exciting and less exacting. Although schools are like jails in that the audiences have no option, still the former are often jealously guarded by principals against being victimized by profitless speakers. Invitations are withheld until word has been passed around, not only as to the acceptability of speaker and subject, but also as to a speaker's ability to hold the interest of the different age groups comprising school audiences. In bringing to you then, an invitation to return to nearly every school, "at any time"—more than once a year, some principals have said—we believe we are giving a good accounting of your investment in this work. One High School principal, in setting the date for our *third* annual talk to his pupils, said: "Just consider this a standing engagement for the first Monday of every school year." There is also a woman's club asking for a *fourth* talk next spring.

The fact that the Department of Public Instruction is at present practically the only channel through which these particular health talks reach the public, seems to be acceptable to the Medical Society and the Woman's Auxiliary, as evidenced by their almost complete reliance on this effective intermediary. The schedule for 1930-31 was distributed last June among the members of the House of Delegates and the delegates to the annual meeting of the Auxiliary. The usual circular letter, again giving dates assigned to each county, was sent October 1, 1930, to the presidents of the 21 auxiliaries. During the course of the year, 6 requests for talks were received from the medical membership. Two of these were last minute appeals which an already full schedule made it impossible to include. A *third* was a most welcome invitation to address the Hudson County Auxiliary, and its acceptance was made possible only through the courtesy of Mr. B. C. Wooster, superintendent of schools in Bergen County, who, to favor the medical group, cancelled 2 school engagements.

With this spirit of cooperation and understanding so generally exhibited, the schedule for the year was carried out pleasantly and for the most part smoothly. When one realizes that, in the dovetailing of 212 talks, at least 250 applications have to be dealt with, involving from 500 to 700 letters or telephone conversations, it is not surprising that an occasional apparently well founded personal grievance should be felt and aired. Considering, however, all the hazards of transportation, weather, illness, forwarded mail and long absences from headquarters, the wonder is that a greater number of such complications do not arise. Only 2 such instances have come to our knowledge this year.

Through the opportunity, generously afforded by the society, of attending 2 of the most important national conferences on child health, your secretary received not only encouragement and stimulation but also much valuable actual in-

formation. At the Health Education Conference of the American Child Health Association, held at Sayville, Long Island, last June, one heard, and sometimes talked with, the most eminent authorities on that subject in this country. Then to have been present at the White House Conference on Child Health and Protection is, of course, to know the last word regarding things done and things hoped for; to bring back to your audiences not only these actual facts, but to bring also something of the thrill imparted by the earnest concentration of such an impressive number of outstanding brains and personalities.

Aside from the notable advantage of being thus enabled to report the pronouncements of such gatherings more vividly as an eye witness to the proceedings, than as one of the many who have also read about them, there rebounds to the medical society from such representation at these conferences a growing recognition of the unique contribution made by the physicians of New Jersey to child health. In this connection might be mentioned also the considerable amount of publicity given by the local papers to your county programs. That such publicity is not confined to local readers was intimated by the statement of a well known surgeon in Baltimore who said he had followed, through his New Jersey home town paper, the increasing interest of that community in the information thus made available by the medical society.

State recognition of this phase of your educational program has come through invitations to your representative to attend meetings of various groups affiliated with public health projects. In February, Commissioner Ellis, of the Department of Institutions and Agencies, called together at a luncheon in Newark all workers in the state concerned with the problems of mental deficiency and the subject of mental hygiene. The primary object of this meeting was unification of plans and objectives.

Other contacts, both pleasant and profitable, were made possible by the invitation of Dr. Edward Guion, of the Northfield Asylum, to attend the meeting of the state Psychological Society, held at the Asylum in March. In April, notification was received of the appointment of your Field Secretary on the Committee on Mental Hygiene for the state follow-up of the White House Conference. While these and similar associations may seem to some of you negligible attentions, they are nevertheless welcomed by the recipient as affording the best possible means of keeping in touch with what the duly appointed state authorities are doing to promote in a general way those health measures which, in your name, she is so constantly urging individuals to adopt.

This report must also mention specifically what has already been quite obvious, namely, the fact that, whatever the achievement herein recorded, it has been made possible largely through the interest and loyalty of one member of the medical profession. Not only has Dr. Ireland shared the vision of those officers and members of the medical society who uphold the educational work, but he has also given whole-heartedly of his time and resources to bring that vision each year into clearer focus.

The indispensable endorsement by Dr. Charles H. Elliott, Commissioner of Education, of the contribution by the medical society to the health program in the schools, is also hereby gratefully acknowledged and commended to your recognition.

Although this is a great day for measuring the

intangible—the intelligence of pupils, for instance, and the efficiency of teachers—no yard stick is as yet available for computing the incentive to more complete reliance on the physician that is imparted to audiences as a whole, or to individuals in particular, through these health talks. It may be a matter of years before any appreciable general effect of this phase of public education can be noted. When the boys and girls, who are now in High School, marry and establish homes of their own, many health measures that were once refused for them by their parents, or were perchance conceded grudgingly as dangerous innovations, will be routinely carried out for their children. This increasing health consciousness on the part of the public should result in an ever firmer adherence to the principles of medical science and to the person of the medical practitioner. Lest such a forecast be deemed entirely speculative, we may cite the proud showing of hands for toxin-antitoxin protection in many of the schools visited this year. Gazing down on sea after sea of upstretched palms, the speaker's inner eye always reverted to those roundtable conferences held at the Academy of Medicine in Newark, under the faithful leadership of Mr. F. J. Osborne, Chairman of the State Antidiphtheria Committee. To have seen that small seed planted in 1927, to have watched and helped a little its careful gardening during 3 successive years, and then to behold, in 1930, something of the splendid harvest, is inevitably to become a convert to the principles of health through education.

A most illuminating contrast was afforded by these pupil audiences when a count was asked in the matter of immunization to small-pox, a subject which has in recent years been given only sporadic attention. Except in schools where vaccination was compulsory, the proportion of pupils who had received this protection was often shockingly small. This matter has been touched upon in almost all of our talks for the past 4 years, but such desultory discussion can have only comparatively negligible results. In some states (among which is Pennsylvania) vaccination is compulsory by law for every child entering public school. The Medical Society of New Jersey would probably be unanimous in its opinion that this state should lose no time in taking this enlightened step. Who is to sponsor the educational campaign prerequisite to legislative action?

Looking toward the immediate future, it is planned to carry out the field work for 1931-32 along the same avenues which have led to success in the past 2 years. Two new topics have been selected: "Common Colds", and "Medical Quackery". The first one is offered in response to repeated requests for specific information regarding the several more or less recent researches along this line. The second was inspired by a statement which lately appeared in print to the effect that the United States spends annually \$750,000,000 on patent medicines and fake cures. The 5 talks (previously enumerated) which we have carried through the year just past will also be continued, making a total of 7 available subjects.

It is the earnest hope of the Department of Public Instruction and of your Field Secretary that the society may see its way clear at least to maintain the present scope of this apparently established and acceptable service.

Respectfully submitted,

Ethel C. Taneyhill.

Field Secretary.



Supplement to the Annual Report of the Field Secretary of the Medical Society of New Jersey 1930-1931

Counties	Number of Talks	Number of Adults	Pupils in Schools	Total Attendance
Atlantic	8	418	1705	2123
Bergen	9	567	1500	2067
Burlington	7	155	2000	2155
Camden	13	285	5205	5490
Cape May	16	331	1570	1901
Cumberland	5	100	1145	1245
Essex	2	40	500	540
Hudson	11	97	5225	5322
Hunterdon	9	120	1150	1270
Gloucester	2	50	380	430
Mercer	15	75	1985	2060
Middlesex	13	333	1575	1908
Monmouth	13	350	4155	4505
Morris	9	100	1325	1425
Ocean	9	104	1325	1420
Passaic	2	550	(ill this week)	550
Salem	8	150	985	1135
Somerset	6	82	450	532
Union	26	633	7750	8383
Warren	10	85	1780	1865
	193	4625	41,710	46,326
Teachers' Institutes	19	.	.	582
Total No. Talks	212	Teachers in schools (est.) 1260		
Total attendance	.	.	.	48,168
Talks to Adult Groups divided as follows				
Service Clubs	8		173	
Women's Clubs	4		255	
County Nurses	6		197	
Teachers' and Principals' Meetings	18		1980	
Normal Schools	4		1855	
Auxiliaries	2		67	
P-T-Associations	30		1945	
Teachers' Inst.	19		582	
Teachers in Schools			1260	
Total number adults			8314	
Total number of talks				212
Total attendance				48,168
Number of miles traveled				6940

President Sommer: You have heard the report of the Field Secretary, what is your pleasure?

Member: I move it be accepted and filed. The motion was seconded and carried.

Secretary Morrison: In regard to the Field Secretary's work, I have the following letter from the Department of Education, under date of March 12, which I desire to read:

1208 Trenton Trust Bldg.,  
March 12, 1931

Dr. J. Bennett Morrison,  
66 Milford Avenue,  
Newark, New Jersey.

My dear Dr. Morrison:

I am moved again this year to speak a word of appreciation to the Medical Society of New Jersey for the very splendid work being carried on by Mrs. Ethel C. Taneyhill in coöperation with the program of the State Department of Public

Instruction. We appreciate not only your courtesy and interest in assigning Mrs. Taneyhill to this work, but also the splendid way in which she is meeting her obligation.

We have many letters of commendation from the field, and in addition, excellent verbal accounts of her work from school administrators as I meet them in my travels.

We sincerely trust that this fine feature of your educational program may be continued and expanded. There is no question about the great good it is doing both in extending health education to the public and in winning good will for the medical profession.

Sincerely yours,

Allen G. Ireland, M.D.,  
Director of Physical and  
Health Education.

President Sommer: I have an announcement to make. Dr. Todd, whom I appointed as Chairman of the Business Committee, not being here, I have substituted Dr. Elias J. Marsh. Further, it would be worth while if this Committee would meet shortly and let us have some sort of report before the end of this session.

We shall now listen to the report of the Welfare Committee. Dr. Lippincott, Chairman.

Report of Welfare Committee

The newly appointed Welfare Committee held its organization meeting at the Stacy-Trent Hotel, Trenton, November 9, 1930.

The past practice in depending upon personal contact by members of this committee with their respective representatives in the Legislature, in their own counties, was adopted, and we feel that the results justified this plan.

The report of Dr. Reik, reviewing the activities of his office during the previous summer, was presented. Radio broadcasting of medical programs in those sections where proper facilities exist was thought to be worth while and it was decided to continue the project. His report covered also the program of the Field Secretary, Mrs. Taneyhill. This work has enlarged very much, and the demands on Mrs. Taneyhill's time are constantly increasing, due largely to the excellent coöperation of the State Board of Education, whereby she has arranged contacts with all the school organizations of the state.

Dr. D. Leo Haggerty, of Trenton, again volunteered his valuable assistance in keeping us advised as to proposed legislation that might demand attention, and the status of all such bills. We owe a great debt to Dr. Haggerty for his sacrifice in giving so much of his valuable time to this unpleasant task.

There were many bills dumped into the hopper this year that could be classed as medical legislation. After a careful and intelligent analysis of such proposed legislation, Dr. Reik concluded that there were 25 bills in all that required consideration by the Welfare Committee. Of the 18 bills to which the Welfare Committee gave endorsement at the meeting on March 2, 10 were enacted into law. Of the 7 bills that were opposed, all failed of enactment. With reference to the 18 bills that were considered satisfactory, it might be noted that none of them were presented by us; that our approval was merely a formality. All bills were carefully studied by this

committee, and an agreement of action decided upon. It was decided that the Welfare Committee should have Dr. Reik, following his usual custom, send a letter to every member of both Houses of the Legislature, informing them of the action of this committee and the reasons, in regard to each bill, for approval or disapproval; this is to be followed by personal interviews in our home counties. Under the watchful eyes and convincing arguments of Drs. Newcomb and Hargrave, in the Assembly, and Dr. Cole in the Senate, supported by the many friends of the profession who are members of both Houses, we were able to defeat or keep in committee all legislation that had not the stamp of our approval. We cannot be too optimistic, however. We have learned our lesson from past experience, that there is not always safety in quiescence.

In addition to matters of legislation, there were many problems that came before the committee. We were interested in the complexion of certain State Boards and Commissions, and decided to recommend the appointment of medical men to these Boards and Commissions where we felt their counsel would be of value to the state. Perhaps our success of this year was due partly to the fact that the politicians have had a diversion that has taken a major part of their time and thought. The great mass of bills that came out of the report of the Abell Commission possibly drew their attention from matters in which we as physicians are interested, and directed them into channels that are of more importance to the practical politician.

The Abell Report dealt with many changes in state government and we to a certain extent were drawn into the whirl. While it was necessary to hold only 3 meetings, committee members responded to the call of the chairman with enthusiasm. The willingness of the members to serve their state and their profession makes the chairman proud of the honor of having been chosen for a second time to preside over this honorable and self-sacrificing body of physicians.

Respectfully submitted by

A. Haines Lippincott,  
Chairman Welfare Committee.

*President Sommer:* You have heard Dr. Lippincott's report on the activities of the Welfare Committee. I think he is to be highly commended for the results that he has achieved with his committee this year. Furthermore, I wish to personally thank the members of that committee for the willingness they displayed in coming out when called for and for the results accomplished generally.

What is your pleasure regarding this report?

*Dr. B. S. Pollak:* If it be permitted, may I interject a thought? Listening to the very able report of the Chairman of the Welfare Committee, I desire to state that there has been lacking a cooperation or coordination between the Welfare Committee of the State Society and the Welfare Committees of the counties. I think that if it were feasible, a plan might be introduced for the coming year whereby a closer contact may be obtained be-

tween the Welfare Committee of the state and the county committees. For instance, there were some bills introduced by Dr. Newcomb and when it was necessary to have any action, Dr. Newcomb felt himself obliged to telephone us and thus get in contact in order to secure the cooperation or the support of the various legislators in our particular county. If we were apprized by our own committee concerning our required cooperation or activity, I think better and more prompt results would be obtainable.

*Dr. Stahl:* That point is very apt. In Essex County we have appointed as the County Welfare Committee the Essex members of the State Welfare Committee in order to accomplish just this purpose of cooperation.

In reference to Dr. Newcomb, we must all recognize that Dr. Newcomb's work on the floor of the Assembly has been invaluable to us, both in work in the Assembly and in informing counties what has been going on.

*President Sommer:* I take it that the incoming President in fixing up the new Welfare Committee will bear those recommendations in mind.

*Dr. Lippincott:* Those bills of Dr. Newcomb were discussed in the Welfare Committee. We approved the stand of Dr. Newcomb on his bill and members from your county were instructed to cooperate with your members of the Legislature, and I don't see what more the Welfare Committee could do than that. Your county members were certainly present at the meeting when this matter was discussed. I think it is just a question for consideration by the local members of the Welfare Committee; when they go back home, if they don't continue this work and their obligations, it isn't our fault.

*Member:* I move that this report be accepted.

The motion was seconded and carried.

*President Sommer:* The next is the report of the Committee on Honorary Membership. The Committee on Honorary Membership has transmitted a report to me and I shall read it.

#### Report of the Committee on Honorary Membership

Your committee would respectfully report that during the past year no names have been referred for nomination as Honorary Members of the State Society, nor has the committee any names to suggest.

Yours respectfully,

Thomas W. Harvey, Chairman  
William G. Schauffler  
Ephraim R. Mulford

*President Sommer:* What is your pleasure regarding this report?

*Member:* I move it be accepted and filed.



The motion was seconded and carried.

*President Sommer:* The next report is that of the Board of Medical Examiners, Dr. James J. McGuire, Secretary.

**Report of the State Board of Medical Examiners of New Jersey**

James J. McGuire, M.D., Secretary

Since the last annual report of the Board, several reports of prosecutions have appeared in the Journal. The following is a brief résumé of the Board's many activities:

*Licenses.* There have been issued 292 M.D. licenses, of which number 82 were by examination and 210 by certificates from other states or the National Board of Examiners; 21 licenses have been issued to osteopathic physicians—19 by examination and 2 by endorsement; 6 licenses have been issued to chiropractors under exemptions in the law, all by examination; 11 licenses have been issued to chiropodists by examination, and 14 licenses to midwives by examination.

*Revocation of Licenses.* The licenses of 4 physicians were revoked during the year 1930; 1 for conviction of a crime involving moral turpitude, 1 for chronic and persistent inebriety, 1 for having presented fraudulent credentials, and 1 for criminal abortion.

*Court Decisions.* One of the most important decisions rendered by the courts during the past year was in the case of the Board vs. Uchin. While this decision was given by a Judge of a District Court, it was handed down after careful study of the chiropody law, and is important because it disposes of such definitions as that contained in the chiropody law. The law attempts to define the practice of chiropody in the following manner:

"All persons holding a valid license to practice chiropody in this state shall be entitled to practice chiropody in all its branches pertaining to foot ailments, as taught and practiced in the schools and colleges of chiropody conferring the degree of Doctor-Surgeon-Chiropodist."

The Board attempted to enforce the chiropody law and produced a licensed chiropodist with the degree required by the statute, to prove the practice of chiropody as taught and practiced in a recognized school. The Court held:

"The statute does not define chiropody, and the court is requested to rely upon a witness for the meaning of the same. Said witness purports to be a graduate of a so-called Illinois College of Chiropody, and testifies that in his opinion the acts or treatments complained of constituted practicing chiropody. I do not agree with him, nor am I satisfied to take his testimony as being competent for that purpose. The act in question sets forth the requirements to obtain a license to practice chiropody, but nowhere does it reveal just what is meant by the practice of chiropody. There is no standard whatever set by the statute, or attempted to be fixed, by which a person may regulate his conduct. I am not willing to convict a person for an act, the violation of which does not depend upon any standard established by the legislature, which may be known in advance, but one created by the judiciary, which may be as varying and uncertain as the varying viewpoints of respective judges, and even which

variable standards cannot be known until after infraction of the acts complained of."

and further:

"It is the duty of the legislature to enact laws specific enough so that a citizen may be entitled to an unequivocal warning before conduct on his part, which is not *malum in se* (a wrong in itself) can be made the occasion of a deprivation of his liberty or property."

and further:

"It is the duty of the judiciary to construe the laws that may be enacted by the legislature, although it is not for the Court to inquire whether the legislature has violated the general principle of liberty and the rights of property, or whether its acts are wise or expedient, or not; but, as I have stated, the statute, in my mind, is so incomplete that I am determined not to adjudge the defendant guilty of the charges preferred against him."

The Attorney General believes that the decision rendered by Judge Goldberger is a very fair summary of the chiropody law and that it would be useless for the Board to take an appeal. The phraseology of the definition of chiropody is similar to that used by the osteopathic profession in its recent attempts to define the practice of osteopathy, and it is for that reason that I am bringing the matter to your attention.

*Prosecutions.* Numerous complaints have been received and given attention. Many of these cases are still under investigation and will undoubtedly be prosecuted by the Board. The following is a brief résumé of the cases that have been tried:

**Court Cases**

Won or settled .....	64
Lost .....	5
Lost by Board, appealed to Supreme Court .....	2
Decision reserved .....	3
Listed in Court and not yet tried .....	25

99

**Hearings Before Board**

License revoked .....	4
Notices served not yet heard .....	2

6

**Classification of Investigations and Inspections**

Druggists Practicing Medicine .....	32
Prescribing Herbs and Drugs .....	40
Medical Doctors .....	47
Unlicensed Chiropractors .....	17
Chiropractors Exceeding License .....	7
Osteopaths Exceeding License .....	10
Chiropodists, unlicensed and exceeding license .....	13
Masseurs and Massage Treatments .....	1
Electrotherapy .....	28
Naturopaths .....	14
Midwives, unlicensed and exceeding license .....	6
Optometrists exceeding license .....	1
Laying-on-of-Hands .....	4
Miscellaneous .....	66
Medical—Revocation .....	2
Midwifery—Revocation .....	2
Colonic Therapy .....	8
Psycho-analyst .....	1

Grand total ..... 299

### Analysis of Inspections and Investigations Made During the Year 1930

Total Number of Investigations and Inspections .....	299
Total Number of Visits and Treatments in the Investigations and Inspections .....	1660
Average Number of Visits per Investigation .....	5½

**Legislation.** The usual number of Bills affecting the medical profession were introduced during the 1931 session of the legislature. During the latter part of the 1930 session, Senate Bill No. 304, which proposed to consolidate the professional boards, was introduced. If enacted into law it would have prevented the Board from enforcing the Medical Practice Act. The State Board of Medical Examiners of New Jersey takes this opportunity to thank the Welfare Committee and the Medical Society of New Jersey for hearty coöperation in defeating that Bill. The Board also wishes to thank Drs. Cole, Newcomb and Hargrave for their support. The Board attributes defeat of the Bill to the whole-hearted coöperation received from the various medical societies and the medical members of the Legislature, and believes that the profession should have a larger representation in both Houses of the Legislature.

**President Sommer:** You have heard the report of the Board of Medical Examiners, what is your pleasure?

**Member:** I move its adoption.

The motion was seconded and carried.

**President Sommer:** Report of the Committee on Post-Graduate Medical Education, Dr. Cosgrove, Chairman.

### Report of Committee on Post-Graduate Medical Education

To the House of Delegates  
Medical Society of New Jersey.

Gentlemen: For a number of years prior to 1927, the American Medical Association and quite a number of State Medical Societies had at successive annual meetings discussed the desirability and possibility of providing post-graduate medical courses for general practitioners, in localities contiguous to their own homes, in order that such instruction would be made available at less expenditure of time and money than if they were compelled to seek it in the regular medical college centers. A number of schemes were suggested, and some tried out in other states—notably in New York and Pennsylvania, where post-graduate teaching facilities are exceptionally good—but none seemed feasible to New Jersey. In the early part of 1927, our Executive Secretary presented the society with a well devised plan, save that it was based in part upon utilization of our own members as teachers; the latter a proposition which he has since become convinced is impracticable. At the Annual Meeting of the State Society that year, 1927, the then existing Committee on Post-Graduate Education reported that there was *no demand among New Jersey physicians for post-graduate instruction*, and the House of Delegates accepted the report and discharged the committee.

During the next 2 years, Drs. Morrison and Reik continued to give thought to this subject, and the latter finally sought a conference with President Thomas, of Rutgers University, the outcome of which was development of a tentative plan for post-graduate medical courses, and an alliance between our Society and the University Extension Division of Rutgers. At our Annual

Meeting in June 1929, the above mentioned plan was recommended in the reports of both the Secretary and the Executive Secretary, and met with approval of the House of Delegates and authorization of the President to appoint a special committee to put it into effect.

Dr. McBride appointed the present committee which started with the plans previously tentatively outlined, and, in close affiliation with the University, carried out the 1930 program, offering 2 rather elementary combination or basic courses, 1 in medicine and 1 in surgery; with the result that 12 of these courses were conducted in 9 centers, each in a different county, which were subscribed to by 400 members at \$30 each, and an average number of 33 subscribers per group. Besides these, there were 30 interns, not members of the society, admitted to the courses at special rates. In this work, the committee determined on the following:

**General Policies.** (1) To make the courses self-supporting, since there were no funds available from the society to carry this work.

(2) To pay instructors: (a) to avoid pauperizing our membership at the expense of our confrères, giving the instruction; (b) to put us in better position to command the time of instructors.

(3) To use as instructors eminent teachers from outside the state so as (a) to enhance interest which we felt would be lacking with local instructors, and (b) to avoid local jealousies in the selection of some of our members and exclusion of others who perhaps were as well qualified.

**Results of 1930 Program.** The reaction of subscribers to these initial courses expressed as much satisfaction as it is generally possible for such work to elicit, and enough benefit to induce the committee to recommend continuation and extension of the work already carried out. The courses more than paid for themselves—an excess of \$1057.87—but, were able to do so only by restricting the offering to groups of 25 or more subscribers, and then only by virtue of the income from much larger than the minimum number of subscribers in a few groups.

**Continued Work of the Committee.** At the 1930 session, President Sommer reappointed the same committee to carry on the work for another season. In reviewing its work, it was appreciated that to continue the attempt to make its post-graduate courses self-supporting, by offering them only to large groups, the committee would fail in making them available to those members of the society who most needed them, namely, practitioners in the relatively rural sections whose normal opportunity for post-graduate contacts are most limited. The chairman, therefore, presented the need of the society for financial aid to the State Board of Regents, on the basis of benefit to the people of the state through better qualification of medical practitioners. This body has recognized the public policy involved by including special provision for the continuation of these courses in its appropriation to Rutgers University. Such appropriated funds will not be available until the next fiscal year, however. But, through the generous interest of the Director of the Extension Division, and his associates, the University has contributed services gratuitously to the value of more than \$6000 to the 1931 program. The committee has paid over to the University the funds held over from last year, amounting with interest to \$1062.85 as a partial offset for this work, leaving the net value contributed by the University more than \$5000.

The committee has continued its original policy



of paying instructors, and, with one exception, which will be commented on in detail, that of using instructors from outside the state.

As a result of the expressions of its subscribers last year, the committee has conducted a much greater variety of more specialized courses; in appreciation of the most urgent purpose of its work it has conducted them in more centers and for smaller average groups. Such multiplication, and reduction in size, of groups, greatly increases the per capita cost of furnishing the courses, which explains the need for financing by other means than the income derived from subscribers, as discussed above.

*Program of 1931.* We have had 19 courses conducted in 14 centers, serving practitioners in 16 or more of the 21 counties of the state, and 350 members have subscribed to the courses at full rate of \$30 each, the average number of subscribers to each course being 18. In addition, 29 interns, not members of the society, have subscribed at reduced rates. Moreover, the committee has permitted a subscriber to one course to attend any other course being conducted in his neighborhood, and many subscribers availed themselves of this privilege, which greatly reduced the cost of instruction to such subscribers.

*Centers of Instruction.* Atlantic City, Bridge-ton, Camden, Elizabeth, Hackensack, Jersey City, Mount Holly, Newark, New Brunswick, Newton, Paterson, Somerville, Trenton and Washington. It will be noted that there are a number of smaller centers in this list which were not covered in the 1930 program. Some of the larger centers also serve men from the contiguous rural sections.

*Subject of Courses.* "Straight courses" have comprised Newer Drug Therapy, Pediatrics, Gastro-Enterology, General Medicine, Obstetrics, and Gynecology; several "combination courses" have included Gynecology and Obstetrics; Heart and Kidney Diseases; Obstetrics, Heart and Kidney Diseases, Gastro-Enterology and Pediatrics; Gastro-Enterology and Pediatrics; Newer Drug Therapy and Fractures. These courses have been arranged to meet the desires of component societies concerned, and in many cases particular instructors have been obtained with special reference to local choice.

*Results of 1931 Program.* All subscribers were furnished questionnaires designed to reflect their reaction to the courses, and 216 of these forms were returned. Analysis of them shows almost universal general satisfaction, in some cases to the point of enthusiasm. Only 6, or less than 3%, of those submitting answers, expressed themselves as lacking interest in future courses. Many suggestions were made of generally constructive nature, among the most important of which are that courses be made as practical as possible, as opposed to too theoretic treatment; that the clinical aspect, rather than that of the laboratory, be stressed; that actual clinical case presentation be provided where possible, and that lecturers be prepared to talk without too great dependence on notes, and with as much ocular demonstration by means of charts, slides, etc., as possible. Other minor suggestions and criticisms, as of hour, place, ventilation, etc., are entirely the province of local committees. Interest for future courses is distributed over a wide range of subjects, among the most important of which are: General Medicine, Gynecology, Heart and Kidney Diseases and Cardiology, Pediatrics, Drug Therapy and Obstetrics. All of these suggestions will be available for most careful analysis by next year's committee.

This year's experience has brought to the front for discussion several special considerations, referable to the work, which require frank answers to definite questions.

*Why must the State Society charge more for its courses than local committees do?* Because of the higher unit cost of furnishing courses to smaller groups. The Hudson County Medical Society 2 years ago provided a course in "pulmonary tuberculosis", at a nominal fee. The work was done, however, by local volunteer instructors, and the project was, I believe, partly subsidized by a lay welfare organization, so that this achievement, very much worth while in itself, is not comparable to that which the State Society has undertaken. During the past winter, the Essex County Society conducted an excellent short course in obstetrics, consisting of 6 lectures, for each of which it paid the lecturer \$75, and for which each subscriber was charged \$10, and secured 90 or more subscriptions. That is to say, had gross receipts from fees of about \$900, and paid the lecturers about \$450, leaving about as much again, or 50% of the gross income, to cover printing, postage, clerical expense and incidentals; presumably the "sales service" for the course was volunteered. Of course it was profitable. However, had there been only 60 subscribers, the gross income would have been only \$600, expenses would have been the same, and the society would hardly have broken even. Now, 60 subscribers were all the State Committee had in that county this spring, from which it derived, however, *two* times the gross income that the local committee did for its course, charged each subscriber *three* times as much as the local committee did, but delivered *four* times as many lectures on a much greater variety of subjects and had less than one-quarter of its gross receipts to meet all expenses other than payments to the lecturers instead of the 50% at the disposal of the local committee. No other county than Essex, it is very safe to say, could have recruited so large a number of subscribers to a single course; and Essex itself could not have furnished at its smaller fee the number and variety of lectures which the State Committee furnished to Essex County members.

This matter may be summed up then by saying that in 1 or 2 of the largest counties single courses may be made to pay for themselves, at a very moderate subscription cost, but that multiple courses can not.

It is the fixed policy of the State Society Committee, however, not to stand in any competitive relation to local projects. There is no coercion as to participation by component societies in programs offered by our committee. On the contrary, the latter feels that it has no duty toward component groups of the State Society membership which are supplied in sufficient measure with post-graduate opportunities under other auspices.

*Why must Rutgers be related to this work and derive half the gross income for its participation?*

Without regard to the value in prestige, of the association of the society's work with the University, but considering the matter wholly from a monetary standpoint, the idea of the University getting half the gross receipts is obsolete. That was the original agreement between the committee and the University, based on what was proved to be a very equitable estimate of the value of the work which the University should contribute. That agreement contemplated that monies paid to lecturers in fees and traveling expenses should be chargeable against the society's half of the gross income, all other expense to be paid out of

the University's half. This year, however, the gross income for operating all the courses was \$10,805, out of which there was paid to lecturers in fees and travel expense \$8360, leaving \$1445 to the University for all other expenses, which was less than 13½%—instead of 50%—of the income. After paying the cost of lantern and hall rentals, printing and mimeographing, postage and stationery and telephone charges, there was left exactly \$282 to pay for all the executive and field service of the University personnel. Why, the travel expenses alone amounted to more than 3 times that sum! As pointed out earlier in the report, the University has actually taken a net loss on the value of this season's work of more than \$5000.

I have pointed out above that the Essex County Society depended on a volunteer committee for its sales service, and it may be, in the minds of those who think the State Society should operate its courses independently of the University, that it would be a simple scheme to extend such volunteer committee work to cover the state, but, no small committee could hope to render such sales service for a state-wide project. Even to the work now dependent on the committee, the chairman and others, notably Drs. Satchwell and Paddock, have gratuitously contributed much time, thought, work, and secretarial service, and all of the members' time and travel expense, and it would not be reasonable to expect them to do more.

The attempt to coördinate the work of a multiplicity of local committees through a part-time, volunteer, central committee would be utterly unfeasible.

To establish and operate a machinery of our own to handle the administrative part of the work would entail a drain on the treasury of the State Society of at least \$5000 annually, and the work would probably be less efficiently done than it is by the experienced, trained personnel that has handled it for the University.

*Is the Committee justified in its policy of employing only lecturers from outside the state?*

In Hudson County this year there was strong sentiment for utilization of local men as instructors, and the committee determined to make an exception in its policy in this regard out of deference to the desires of the Hudson members, and to test that policy by actual comparative experience. A compromise program was, therefore, set up, whereby the 8 lectures in gastro-enterology were given by 4 local men and 2 New York men, the 8 in obstetrics by 4 local and 4 New York men. Out of the 34 subscribers to those 2 courses, 24 turned in answered questionnaires and 9 of them gave definite answers to the question, "What has been your reaction concerning the type of lecturers engaged this year?" It will perhaps be most useful to quote their answers in detail:

(1) "Not as favorable as last year; other than local men would be more appreciated." (There were no local men last year, but the subject matter of the courses was entirely dissimilar.)

(2) "Lecturers from South Jersey to lecture here, and lecturers from this section to lecture in South Jersey, along with teachers from New York or Philadelphia."

(3) "Better than previous course". (This seems the antithesis of No. 1 above, but this man chooses 2 New York men and 1 local man as having made the best impression.)

(4) "I preferred out-of-town rather than home lecturers—yet the very best lecture, to my mind, was given by a home man." (This man had attended both courses and had taken stenographic record of the lectures.)

(5) "Men who are accustomed to teaching make best lecturers."

(6) "Older men, with experience, give most practical information."

(7) "Excellent where eminent trained teachers have lectured; fair otherwise."

(8) "Suggest obtaining more lecturers with greater teaching experience."

(9) "Some local lecturers not as good as men with teaching experience."

It would seem to me fairly obvious from those quotations that the student groups react more favorably to out-of-state teachers, although I will admit that a more extensive canvass is desirable, and that the choice of local teachers by no means exhausted the good material available.

#### RECOMMENDATIONS

(1) That the present special committee on Post-Graduate Medical Education be continued and be charged with the continuation of the work.

(2) That the society take cognizance of the great and generous service rendered to it, in connection with the work of this committee, by the University Extension Division of Rutgers University, by a formal resolution directing its secretary to transmit to the officers of that division an expression of its appreciation, and further directing that a copy of such communication be forwarded to the Board of Regents of New Jersey.

#### CONCLUSION

The Chairman desires to express to the members of his committee his sincere thanks for their counsel, time, hard work and loyal support; and, in their behalf, appreciation of the interest and constructive helpfulness of Professors Elmer C. Funk, B. C. Hirst, Frederick C. Holden, John J. Moorhead, Charles Hendee Smith, Mills Sturtevant, B. P. Watson and John C. Wyckoff; appreciation of the time and interest of scores of other splendid lecturers from other states and from our own membership; of the wise and constant counsel of Professors Miller and Chaffee, of the University Extension Division of Rutgers University, and the faithful work of the University office and field staffs; of the support and assistance of the officers of the society; and of the helpful coöperation of the several county society committees; without all of which the work which the committee attempted must have failed.

Respectfully submitted,

S. A. Cosgrove, Chairman.

*President Sommer:* You have heard Dr. Cosgrove's report. I think it should be received, all right, and its recommendations approved. Will someone move to do so?

*Member:* I so move.

The motion was seconded and carried.

*Dr. F. H. Morrison:* May I speak with reference to this post-graduate instruction? Being a member of the Sussex County Society, in rather an isolated community, away from the centers of large hospitals and public instruction, I feel that we are particularly interested in having more of this post-graduate instruction. I speak in reference to the work given this year and last year, and I can assure you that the men from my county are very much interested in having it continued.



I, personally, attended 16 lectures last year, and I think this year I made it 17.

The men up there are interested and in a sense it has been the salvation of our local society. In the larger communities, where you can have your society meetings frequently and maintain a steady interest, it is very good, but in the smaller communities it is difficult to get the men out to routine society meetings. This matter of post-graduate instruction has been the means of getting our men interested again in scientific work and in carrying on further study.

As regards the quality of the lectures, I feel that they have been most satisfactory this year, at least the ones I and other members of our society have heard. Economically, this certainly is the best way to obtain any form of post-graduate instruction. I have tried the others, and appreciate now the great opportunity opened in having a man of eminence come into our own community, when we need only lose 2 hours in the evening for a lecture, and one certainly can afford that. I believe that it is the best thing made available to us; for the local societies to have these post-graduate courses.

There is one matter which I might speak of in reference to future programs. Could they be so planned that they would have some ultimate definite object, not for the immediate year, but for a period of 2 or 3 years? In other words, instead of the men selecting what topic they'd like to hear within a year, have a general course planned to cover 2 or 3 years, in which is included the general subjects which are desired. Furthermore, if a statement, an outline of each lecture, could be presented to the men before the lecture is given, in order that they might have an opportunity to look up that particular subject, or do any collateral reading which is desired, I feel that would be of great benefit to the men. I can assure you that for the outlying districts this method of post-graduate instruction is a boon to all of us and I am sure the men appreciate it and I certainly hope it will be continued. (Applause)

*President Sommer:* I am sure, Dr. Morrison, that Dr. Cosgrove feels highly edified by those kind words of yours, and I am sure that the committee, from my associations with its members this year, will be only too willing to go the limit with the various county units in an endeavor to furnish real valuable post-graduate instruction.

The next report is that of the Committee on Public Hygiene and Sanitation, Dr. Jackson. He does not seem to be here.

Next is the report of the Committee on

Hospitals and Medical Education, Dr. Cosgrove, Chairman.

*Dr. Cosgrove:* There is no report, Mr. President. This is a new committee that was set up last year by adoption of the new By-Laws, and I was pretty busy with the work of the Post-Graduate Committee and I have not discovered what we are expected to do. I wrote to Dr. Reik and asked what the function of the new committee was, and I got a letter from him stating that, in so far as he knew, no definite plan of work had as yet been devised; so, I have not called a committee meeting.

*President Sommer:* All right, Dr. Cosgrove, your excuse is accepted.

Next is the report on Indemnity Insurance, Dr. Beling, Chairman.

#### **Report of Committee on Medical Defense and Indemnity Insurance for the Year Ending June 1, 1931**

Last year 1420 members were insured under the policy of the United States Fidelity and Guaranty Company, of Baltimore, Maryland, an increase of 30% over the year 1929. The number insured this year is 1581, out of a membership of 2546, being approximately 3/5 of the total membership. There has been an increase of about 11½% over the previous year, indicating that more members are availing themselves of protection against claims for malpractice. Mr. William N. Heard, the official broker, has brought this about by an intensive, personal campaign of visiting the doctors and explaining to them the advantages of the protection offered under this plan of the State Medical Society. The Committee has cooperated with him and has gained some interesting and valuable facts. There was a more or less general impression among doctors that protection afforded them was under a group certificate plan and not on the basis of an individual policy. They also believed that our policy was not broad enough in its coverage. Mr. Heard was able to show that the policy is an individual form, and that it is freed from technicalities and covers all claims arising in the practice of their profession. However, the Insurance Company has given us further assistance in this direction by elucidating and expanding the interpretation of the contract.

The U. S. F. & G. Company announces now to doctors that for the first time in any malpractice policy this company has specifically included by endorsement claims or suits for loss of service or for property damage. Since some Courts consider that the doctor enters into implied contracts with his patients, this condition is definitely shown in the policy. Mental anguish is also included. These changes are made so as to leave no doubt in the society's mind of the intent to protect the individual doctor against every hazard due to professional treatment.

Included also in the contract to defend the doctor, in addition to paying any judgments, is the further agreement to furnish any bonds on appeal, or the release of attachments or garnishments, to amount of the first limit of the policy.

The endorsement attached to the report is considered by the company as part of the policy contract as now held by the society.

The average number of claims filed against members of this society for the past 2 years was 60, and this seems to warrant our serious attention at this time to devise a way to acquaint the doctors, through the Journal, as to the nature of claims filed, in order that we may avoid some of them and their resultant suits. To this end, the committee recommends that 1 column of each issue of the Journal be set aside for the discussion of such matters, thus keeping each member fully advised as to the kind of suits filed, and place him in a position to avoid similar cases. The reduction in claims is vital and will prove for the good of the individual and the society as a whole, and we believe this medium the best to attain our purpose.

Table Showing Number of Insured Relative to Total Membership of the Society, by Counties:

Total Membership	County	Number Insured	Percentage Insured
105	Atlantic	66	62.8%
164	Bergen	101	61.5
50	Burlington	23	46
129	Camden	55	42.6
20	Cape May	10	50
50	Cumberland	29	58
645	Essex	494	76.6
30	Gloucester	19	63.3
410	Hudson	211	51.5
25	Hunterdon	11	44
147	Mercer	95	64.6
111	Middlesex	53	47.8
75	Monmouth	33	44
71	Morris	47	66.2
15	Ocean	3	20
196	Passaic	113	57.7
14	Salem	7	50
41	Somerset	22	53.6
18	Sussex	2	11.1
208	Union	176	84.6
22	Warren	11	50
2546		1581	62.09

The continued activity of our official broker will, we feel assured, ultimately effect protection for practically the entire membership; as, when the value of placing their insurance with the society's company becomes known through his personal interviews, they will be glad to take advantage of it.

The committee wishes to express to the officials and members of the society its appreciation for their cordial coöperation, which has been a great aid in making this progress.

It is our recommendation that the contract be renewed, through the same agency, and we take this opportunity to commend the service of the company, which has been so highly satisfactory.

Respectfully submitted,

Christopher C. Beling, Chairman  
Alexander Marcy  
John C. McCoy  
Edgar A. Ill  
Erwin Reissman

*President Sommer:* You have heard Dr. Beling's report, what is your pleasure?

*Member:* I move that it be accepted and filed.

The motion was seconded and carried.

*President Sommer:* The report of the Committee on Group Health and Accident Insurance, Dr. Pinneo.

## Fifth Annual Report of Committee on Health and Accident and Automobile Insurance

We offer this report with gratification over the advance made this year in the advantages offered you. The chief aim of the committee is to make the insurance under its jurisdiction good for our members, and this in 2 ways: (1) By seeing that the contracts are the safest and, in coverage and premium rates, the most liberal we can negotiate for them. (2) By helping adjustment of claims in any cases where it is possible to secure more than the contract strictly covers. In the first we have had this year signal success, extending the coverage for health insurance to sickness not strictly "house-confining", and in extending the period of indemnity for sickness to 6 weeks (instead of 4). This Group Health & Accident policy, now is, for the very low premium asked, the best we have found it possible to procure and, with this committee in position, with authority under the contract, ready to act as friendly intermediary in the behalf of a policyholder, he has advantages which individually he could not procure with any company. In the second, the year has been characterized by success in negotiating settlements for our members, showing the advantages of a Group Policy through a friendly committee capable of helping with medical advice.

The settlements by the Insurance Company of claims during the year have been satisfactory to members concerned without a single exception. From our files we quote a few extracts from letters, which were all voluntary and express such a spirit as encourages us to believe we render a real service, as a fraternal committee, in adjustments which individual policy holders, dependent strictly upon the legal contract, might not secure.

"I appreciate very much your assistance in bringing about a settlement."

"I want to thank you for your promptness and courtesy in this matter, and I shall be very glad to recommend your company to the rest of my medical friends."

"Allow me to thank you for the satisfactory adjustment of my claim. The insurance company was liberal, for had it adhered strictly to the terms of the policy I would have gotten much less. \* \* \* I feel that the Medical Society of New Jersey is lucky to be insured with such a company and that we may congratulate ourselves on having such an efficient committee, of which you are the chairman."

"I wish to thank you for the able service you rendered \* \* \* and in getting a check from the company for \$414.28, the full amount of benefit claimed. I feel that members of the society who are insured are very fortunate in having such a painstaking and efficient committee to act as intermediary in their behalf \* \* \* I have written the company expressing my appreciation of the generous interpretation of the policy."

"The company replied promptly and sent me a check in full for my claim. Entirely satisfactory. I am more than pleased. I am 77 years old and drive my own car."

"The spirit of the enclosed copy of a letter received from the company, this morning, is so fine that I thought it well to bring it to your attention as an encouragement to other physicians who are already taking advantage of this Group Insurance and maybe it will induce some who have not availed themselves of this opportunity to do so."

"I want to acknowledge and at the same time



thank you for the check of \$250 (additional to previous \$200) sent by the company, which some of the doctors of the New Jersey State Medical Society have joined and more should join. The company was considerate and made a digression from the stipulation on house-confinement. I am grateful to you for your recommendation and in view of this fact and such treatment, it would seem well for more of our doctors, of this state, to take advantage of same." And his County Society writes: The doctor's case "has been so satisfactory that quite a number of us are strongly considering patronizing more of the various types of insurance that come under the jurisdiction of the State Society." In this case \$1375 was procured for him.

A summary of the business done follows:

#### HEALTH & ACCIDENT

For the year ending April 30, 1931

Number of members carrying the Health & Accident Policy .....	186
Number to whom benefits were paid ....	32
Amount of these benefits (33, ranging in amounts of from \$21.43 to \$350) .....	\$4351.50
Besides 10 cases of sickness still running.	
Ages of these beneficiaries:	
Under 50 .....	6      671.41
50-60 .....	12      1199.97
Over 60 .....	15      2480.12
Total .....	33      \$4351.50

Our automobile policies are standard policies but offered to our members at discounts from standard rates, and a dividend which amounts to from 15 to 30%. The law requires that separate companies carry the risks in casualty and fire and theft but we have our policies all with 2 companies, some mutually associated, and both having our agent; so that the policies are written under one "cover" and so delivered to you that you need only deal with our agent for all.

Number of members insured .....	246
Number carrying casualty policies ....	242
Number carrying fire and theft policies .....	71
Indemnities paid:	

Casualty .....	\$2626.05
Fire and Theft .....	800.00

In conclusion, all the work done has been without expense to the society. The printing and circulating of the Reprint from the Journal was borne by the agents. The committee only needs a moderate amount of stationery for necessary correspondence, like other committees, and recommends that it be supplied.

Respectfully submitted

Frank W. Pinneo, Chairman  
J. Finley Bell  
Austin H. Coleman  
James S. Green  
Fred J. Quigley  
Irving D. Williams  
Chester I. Ulmer  
Clarence W. Way  
George N. J. Sommer, President  
J. B. Morrison, Secretary  
Elias J. Marsh, Treasurer

#### ADDENDA

Supplemental to this report, may I add a personal word explaining why I urge this insurance; the Health & Accident particularly. In it, a member is offered something valuable for himself,

not asked to contribute for use of others any of his money, or time, or service, for which doctors have demands enough. The urge, therefore, is with a feeling that is not mitigated by any benefit he is thereby giving to anyone else or any other cause. We have not the remotest interest of any kind in any companies or agents; indeed, the Health & Accident policy itself is a product of our negotiations with 2 companies successively from a doctor's standpoint of needs and is not a regular policy pushed by a company for its own benefit.

*President Sommer:* You have heard Dr. Pinneo's report on Group Health and Accident Insurance, what is your pleasure?

*Member:* I move we receive it.

The motion was seconded and carried.

*President Sommer:* I wish now to make an announcement. It seems right and proper, in view of the difficulties we are having with the Constitution and By-Laws, that for the next year a Reference Committee be continued. That committee will consist of Drs. Quigley, Morrison and Lathrope.

Before we take up the report of the Delegates to the American Medical Association, Dr. Ireland wishes the privilege of the floor for a few minutes. The society is willing. I am sure, and I shall invite Dr. Ireland to speak. (Applause)

*Dr. Ireland:* Thank you, Dr. Sommer, for this privilege. There are 2 things I have in mind and I shall get them off as quickly as possible. As you know, I am connected with the State Department of Public Instruction, in charge of School Health Work. One of our obligations is to prepare a program of work for the school physician. We do not prepare a program and put it into the schools without the approval and support of the State Medical Society. The manuscript is about ready to be reviewed, and I felt that perhaps the best way of having this society approve the policies, the program, the activities and standards, which we feel should be introduced into the public school system, would be to have a committee appointed from this society to work with me, and with the State Department, not only for this program but in deciding other problems and reviewing other situations which may arise.

Across the hall at the School Physicians' Section, it was moved, seconded and voted that a resolution from that Section should be brought before this House, to that effect. The resolution states that the House of Delegates be asked to consider the proposition of having a committee, possibly of 5 members of the Welfare Committee, or 5 members at large, depending upon the wish of the State Society, to act as an advisory committee on all medical affairs concerning the public schools, an advisory committee to work with

the State Department of Public Instruction in order that the work carried on by school physicians may be in accord with the policies and aims of this State Medical Society. I bring that to you, Mr. President.

The second point I wanted to mention is this: From a number of physicians and superintendents of schools and boards of education, during the past 2 years, has come the inquiry—"How should we pay school physicians? What should we pay?" I tried to find out from other states what was being done, and I find nothing. There is nothing in the literature. But upon investigation throughout the state, we find that school physicians are paid by the pupil, by the hour, almost by the minute, by the week, by the month, by the year, or by the visit to the school, or with relation to particular types of activity. There is absolutely no uniformity of standard. Some physicians are being paid, perhaps, properly for a given piece of work, while in a neighboring town another physician of the same talent and ability, with the same number of pupils, is getting as much as 1/2 or 1/3 the pay of the first man. There is no equitable basis. I think it is true that possibly no physician is being paid his worth.

It is also true that the school cannot expect the type of service it wants unless it is ready to adequately compensate you for your talent and skill. Now, it seems to me that while we in the department do have the right to make a study of salaries, and a basis for determining those salaries, that again it should be done in cooperation with this group, with this society, and so I am calling upon you for a committee, perhaps this same committee, Mr. President, which I just spoke of, a committee to work with me—it will be with me individually but ostensibly with the department—to study how physicians are being paid in schools, and from that study to arrive at a fair and equitable basis of determining salaries. I think there is a great deal of merit to the proposition. There are some 550 school boards asking for just this sort of help. They don't know what to do. It will save the individual physician a great deal of embarrassment in his home town, save physicians from having to promote themselves and to engage in salesmanship to get a proper salary, if from the State Department we can go to every Board of Education in the state and say—"Here is what the school physician should be paid for a certain type of work, for additional types of work, for so much time", or whatever standards we set up. I think it is very greatly needed and will in the long run, once established, work to your advantage and to a better type of work in the schools.

So there are those 2 things. We do need your help very, very much. We are anxious that the school health program shall be a medical program with your backing, with your support, the type of things that this society believes in and wants done, and we don't want to do that alone; we want you to work with us, and I think perhaps an Advisory Committee to which I can go with questions and problems and my troubles, and get authentic advice and support, is the best solution. Thank you, Mr. President. (Applause)

*President Sommer:* You have heard this proposition of Dr. Ireland. Does anyone wish to discuss it?

*Dr. F. J. Quigley:* If it is in order, Mr. President, after listening to this very fair and comprehensive discussion with regard to relationship of the society to the State Board of Education, and the fine spirit that has been exemplified, I move that a subcommittee of 5 of the Welfare Committee be appointed to carry out the proposals that were made by Dr. Ireland.

The motion was seconded and carried.

*President Sommer:* Dr. Newcomb, did you wish to discuss that?

*Dr. Newcomb:* I was only going to make that same motion.

*Dr. A. J. Mitchell:* Dr. Ireland has certainly brought up a very good subject. He brought out some very important points for us to take into consideration. As to this question about handing it over to a committee, I hope it will be a committee that will not put it to sleep, but will consider the matter seriously and actively.

*President Sommer:* The resolution has been passed, and I can say for Dr. Mitchell's information that this problem will be considered properly, and undoubtedly action will come out of it.

*Dr. Mitchell:* If it does, it's all right.

*President Sommer:* The committee will take care of it. Report of the Delegates to the American Medical Association is now in order; Dr. Hagerty, you were one of those delegates.

*Dr. John F. Hagerty:* The report was published in the State Journal some few months ago by Dr. Stewart, of Atlantic City, and Drs. Mulford, Conaway and I thought that might be sufficient for the committee. It is so long since the meeting occurred that a report would not be pertinent at all, and the fact that it has been published in the Journal is probably enough. (See Journal of August 1930, p. 694.)

Dr. Hagerty presented an excerpt from the



Journal of the Medical Society of New Jersey of August 1930.

*President Sommer:* Is there any unfinished business? If not, the subject of new business is now in order.

*Dr. B. S. Pollak:* Mr. President, I desire to present, on behalf of the Hudson County Medical Society, a resolution which has to do with a matter which was discussed at our Judicial Council District Meeting and has been repeatedly referred to here. It is in regard to the question of specialists. It may be known to the majority of the members of this State Society that a representative from Michigan is to introduce a resolution in reference to this matter to the House of Delegates of the American Medical Association next week at Philadelphia.

We, the delegates from Hudson County, have studied and favor the resolution, with the exception of one clause which we have amended, and we now beg leave to submit this for your consideration, to the end that it may be accepted, and perhaps by your resolution referred to the New Jersey Delegates to the American Medical Association:

*Whereas*, the advancement of medical science through the results of research and practical experience has stimulated many physicians to confine their professional activities to limited and special fields of medical practice; and

*Whereas*, there has thus been created a class of specialists in medicine; and

*Whereas*, there appears to be a growing tendency on the part of physicians who are not properly qualified to hold themselves out as specialists; therefore, be it

*Resolved*, that the speaker of the House of Delegates shall appoint, by and with the advice of the President and the Board of Trustees, a commission on qualifications for specialists, composed of 9 members; that said commission shall undertake to define the qualifications that should be required of the individual physician who desires to limit his practice to any special field and to be known as a specialist; and that in arriving at such definition the commission on qualifications for specialists should give consideration to the question of education, training, and clinical experience; and be it

*Further Resolved* that this commission shall give consideration to the present status of specialization in medicine and shall define the various specialties which, in the opinion of the commission, may be considered as necessary for the best interests of the public and of scientific medicine; and be it

*Further Resolved*, that the Council on Medical Education and Hospitals be directed to render assistance to the commission on qualifications for specialists and that the Board of Trustees be required to provide necessary clerical assistance; and be it

*Further Resolved* (and here is where we differ from the Michigan resolutions inasmuch as they desire to have state legislation concerning this), that this commission shall report to the House of Delegates a plan whereby the purpose of this resolution may be accomplished by appropriate

action on the part of the various state medical societies without resort to legislative enactment; and be it

*Further Resolved* that the report of this commission and its recommendations shall be submitted to the House of Delegates through its secretary at the next annual session.

*Dr. Pollak:* Mr. Chairman, I move the adoption of these resolutions.

The motion was seconded.

*President Sommer:* It has been moved and seconded to amend the Michigan plan, which is to be submitted to the House of Delegates of the American Medical Association, and that the delegates from New Jersey be instructed to carry through this amendment, if possible, or to present this amendment to the Michigan plan.

*Dr. G. V. Warner:* Will you give some of us a chance to say something on that?

*President Sommer:* Certainly, Dr. Warner. It seems to me that this is pernicious legislation and unless we care for that kind of legislation let us not pass it too hastily. When I was graduated from college, the dean of our university said to the graduating class: "Now, gentlemen, some of you will want to take up a specialty but I beg of you do not consider any such thing until you have had at least 10 years of general practice." The tendency of today's specialists and today's specialism is founded upon graduation only, without any experience. We know that the pendulum has been swinging that way for a number of years; we know now that the pendulum is swinging back to its normal position. I beg of you, before we hastily pass legislation of that kind, that it be properly considered.

*Dr. Pollak:* In discussing this problem, may I say that our reason for bringing this matter before you is based upon the fact that when the Second Councilor District Meeting, of which we are a part and parcel, met during the past spring this matter was carefully considered and this action is a culmination of that consideration. I want particularly to call your attention to the fact that we are not asking for legislation but, quite contrary to that, we are trying to eliminate legislation so that the specialist may be designated by his confrères and not by reason of political action. Furthermore, we are merely asking the American Medical Association, which will be asked anyhow by Michigan, to study this problem and to submit its findings for our consideration, or for the consideration of some future House of Delegates that may convene; but, I want to particularly emphasize the fact that we are opposed to any legislation and we have so stated in our final "Resolved", in which we have amended the

Michigan plan, and emphasized the fact that it should be referred to the various state medical societies without resort to legislative enactment.

*Dr. W. A. Tansey:* We all of us are more or less trained physicians. Most of us at some time or another have done surgery. Some of us have done a great deal and some of us have done very little. I once heard one surgeon say that if you had plenty of courage, it didn't matter how much brains you had, you could go ahead and do the work. Of course, he was wrong, but that was his statement.

Agreeing with this gentleman here, regarding specialists, it may be all well and good. We have eye men who stick pretty close to eye work; we have ear men and nose and throat men, who stick pretty close to that. We have a few surgeons who do nothing but surgery and they stick pretty well to that; once in a while they go over. A majority of the rank and file will take everything. If a pneumonia or typhoid case came along, they would take it on the side.

I disagree very strongly with this doctor from Hudson County. Because some man from Michigan has brought out this resolution, that doesn't say we need to follow Michigan. They may have a lot of blind rules but when a man is trained, and he works up after 10 or 15 years along a certain line, if he has done post-graduate work and wants to pursue it and wants to pursue it faithfully, for instance, surgery, let him pursue it and let him stick to it. There are gynecologists who go outside of their field and take pneumonia and typhoid cases and various other things. You are going to have a lot of trouble keeping those men in line. There are obstetricians who get out of their line, too. And that is the way it is going to be done regardless of legislation if you are going to try to force people into the specialist class. I think it is the wrong thing to go into and I disapprove very strongly.

*Secretary Morrison:* Mr. Chairman, 2 years ago and again last year, the representatives of the Medical Society of New Jersey at the Conference of Secretaries held in Chicago brought up this matter of surgical specialties. We related to that group the fact that a bill had been introduced in the state of New Jersey 2 successive years and we prognosticated that similar legislation would appear in the other states and that the matter had better be studied. Evidently such legislation has sprung up in Michigan. There is no question in our minds but that something must be done, preferably by state societies, to control specialism.

As Dr. Warner has said, there was a time when we thought we should have 10 years of experience before we were bold enough to step out in the field of surgery. Today many graduates from college step directly into the field of specialism. It seems to me that the peers of the doctors in medicine, their peers in the different specialties, should be the ones to judge of their qualification before they begin to practice on the public. Today, all that a man has to do to be a specialist is to hang out his sign and announce to his confrères that he is practicing a specialty, in any one individual line, and his success depends upon his boldness and the number of patients sent to him by his friends. Some of the outstanding national organizations, for instance, the College of Surgeons, the Ophthalmological Society, and one or two others, offer to certify the qualifications of men engaged in certain lines of specialism, and it seems to me that the time is coming when every state society must provide some method by which regulations shall be carried out and specifications laid down, possibly with a special examination, before any man will be given the right to announce himself as a specialist. He must demonstrate to a committee, a proper committee from the State Society, where he graduated, how long he studied, what his post-graduate work was in his chosen specialty, what his hospital connections are and how well he is equipped to carry on this line of work, and then he should be certified as a specialist.

It is going to require a great deal of thought before the proper plan can be worked out but you may be assured that the members of the House of Delegates are considering this, and some have been considering this for 1 or 2 years now. They are simply bringing this matter before the House of Delegates so as to get it on record officially, and the committee, when it is formed, will probably study this for 2 or 3 years before further action is taken. We hope our delegates will go out with the idea of keeping this matter out of legislation, absolutely keeping it out of the control of the State Board of Medical Examiners and politics, and see to it that whatever regulations are made will be done through committees appointed by the state societies.

*Dr. S. T. Snedecor:* I am Councilor of the district in which this resolution was adopted. I would like to explain to this gentleman that the purpose of this resolution was not to make it easy for men to become specialists but to find some way of making them properly qualify to be specialists, to forestall such legislation as Dr. Morrison has mentioned,



and that nothing hasty was contemplated about it although a great deal of time and study in a survey of the methods that are being proposed in Europe, Canada, and the United States was given when preparing this resolution. I feel that it is a forward step for the correction of the evils of specialism, upon which I feel very keenly myself, for it has been all too easy to become a specialist instead of a general practitioner.

*Dr. H. B. Door:* I am very glad that this thing has not become a matter of legislation thus far. I think it is very fortunate and I think the point is well taken. But it does not necessarily follow that in a move of this kind, 9 men should make the decision. I believe, personally, that it is meddlesomeness on the part of the society. I don't think it is intentional meddlesomeness, but I don't think it is a good move. You speak about the work being judged by peers. It is a question sometimes who are men's peers. I have had men in consultation myself who were men of experience, with many years in general practice and also specializing along certain lines, and I have had those men help me out of my troubles. They weren't strictly specialists but they knew enough about a particular specialty to get a patient well, and that is what we are here for. If the ophthalmologists wish to make a special ruling for their own society, that is their privilege. I don't think that is an argument.

*Dr. Schapiro:* I rise for a point of information. Several years ago I heard Dr. Eagleton state at one of our meetings that at one time the State Medical Society had the right to give the degree of M.D., and that was later returned to the state. What other right has the State Medical Society along those lines?

*President Sommer:* We still have that right to give a license.

*Dr. Schapiro:* Then may I suggest that the State Medical Society, instead of going to the American Medical Association, start something of its own accord and that we have our own degrees, whether we call them ophthalmologists or rhinologists or dermatologists, that we may specify who may call themselves specialists.

I agree with the resolution from Hudson County, but I think this is going to be a long drawn out affair. We have specialists who take a course in gastro-enterology; I wouldn't trust myself in their hands and I don't propose to trust my patients in their hands. I think we ought to take some stand on this matter and I would bring this suggestion to your attention. But in the meantime I second the motion of Dr. Pollak.

*Dr. Hagerty:* I feel that Dr. Pollak's resolution should not be adopted. That is, I feel that our Delegates to the American Medical Association should not be instructed to vote for this resolution without further consideration on their part. This is not a matter that is very easily decided. The solution of this trouble is still in the air. I may say to you that this question has been before the Welfare Committee of this State Society for the last 2 years, and a committee was appointed to study this question and we have not been able to arrive at a definite conclusion.

I may tell you that at the American Medical Association meeting last year, the Secretary, Dr. West, the Chairman of the Council on Medical Education, and the Chairman of the Judicial Council had never heard of such a project at all. Not one of them was familiar with the fact. They didn't know any such movement was on foot. That is rather precipitant on the part of the Michigan Society, and we are not prepared to say what action we should take.

As a result of the work in our committee, I think I can safely say that while there might be reason and need for the regulation of specialists, the regulation should not be brought about by further restrictions on the rights of anybody to practice medicine. That was our feeling, that a man, having complied with all of the requirements set up in the state, should be protected. If there should be specialists, some way will have to be devised to deal with the unsatisfactory ones, the inefficient ones, but the man who does his work well should not be subjected to further legislation. That is what was contemplated here in New Jersey, at least 2 years of application before the Board of Examination for the right to practice surgery or any specialty, and it would have worked a great hardship on many well qualified, capable men in this state. That would compel them to submit to an examination and some would probably have their licenses revoked.

I do not feel, myself, that we understand the situation well enough as yet to take any definite action in the matter. I think it is better left to the delegation to attend the American Medical Association meeting and be guided by what is learned there.

*Member:* I move that this be laid on the table for a year.

The motion was seconded.

*Dr. Newcomb:* I think this is a step in the right direction but there is a lot of detail to be worked out. I might tell you, as Dr. Hagerty did just before he closed, that there has been a bill in the legislature for the past 2

years. I think this reform should come from within our own society and not be left for some politician to introduce a bill in the state legislature forcing certain things upon the doctors, and that is what is going to happen. It has been there 2 years and we have been fortunate enough to keep it in committee.

In the first place, there isn't a hospital large enough in the state of New Jersey to comply with the provisions of that bill. Last year it was modified a little bit. I don't know what it will be next year but probably the same bill will be introduced next year by some of the men who are hostile to the medical profession.

If I may, Mr. President, I'd like to say a few words regarding our program of legislation.

*President Sommer:* A little later. Let's get this settled. It seems to me it is hardly fair, in view of the youth of this problem, to tie the hands of our delegates to the American Medical Association, to fix them to a set program. I think this requires a lot of thought and study. We are all agreed, probably, that something ought to be done about it, but how to go about it is an entirely different proposition and this will require considerable study. No matter what we do here today, this thing is going to be discussed at the American Medical Association meeting. Let us send our delegates untrammelled and free to use their best judgment. We know who they are. They are sensible and sane and they are actuated by the best interests of the profession, and I think in the end will get somewhere. But certainly the American Medical Association will hardly settle that problem this year. As I understand the opinion of leaders in the A. M. A., as I met them in Chicago at the last meeting of the State Society Editors and Secretaries, they will not be very hasty in coming to a definite conclusion as to what to do about it.

As the introducer of this idea, Dr. Pollak, are you satisfied with that thought?

*Dr. Pollak:* I appear as the spokesman for our delegation in reference to this resolution. I am directed by our delegation to present this resolution. It just so happens that I am also a delegate to the A. M. A., but it is not for that reason it was referred to me.

*Secretary Morrison:* May I say a word more? There is no question but that the majority of the men in this room are in favor of taking some action in regard to the control of specialists. I feel with the President, however, that when we pick out 4 or 5 representative men and elect them to represent us in the House of Delegates of the A. M. A. we should trust enough in their integrity

and ability to send them there without tying their hands.

Therefore, I move an amendment to the motion make by Dr. Pollak, that the resolution presented from the Hudson County Society be turned over to our delegates for discussion at the House of Delegates of the A. M. A., and that they be sent their uninstructed.

*Member:* I second that.

*Dr. Warner:* There is a motion before the house, I believe.

*President Sommer:* This is an amendment to the motion.

*Dr. Warner:* I mean a motion to lay this on the table.

*Dr. W. N. Barbarito:* This isn't a discussion on the amendment but a remark on what had previously gone by which may have some effect on the amendment. It seems to me that Dr. Hagerty, on study of the situation, has come to the conclusion that there shouldn't be any restrictions of a legal nature upon the medical profession. He very strongly urged that and yet comes to a different conclusion. The best way, it seems to me, to protect the medical profession is to send down our delegates to the A. M. A. with definite instructions. Since this is such an infant, that is all the more reason why we should protect our interests and for that reason it seems to me that the best and greatest protection to us would be by instructing our delegates to support only those measures which do not bring into play legislative action.

*Member:* There is a motion to put this on the table.

*President Sommer:* It was not seconded.

*Member:* I seconded Dr. Morrison's amendment.

*Member:* A motion to lay on the table is not debatable and it was moved and seconded to lay this on the table.

*President Sommer:* The Chair will rule that the original motion stands and the amendment stands, being seconded by Dr. Hagerty. The question is on the amendment.

The question was put and the amendment carried.

*President Sommer:* Now we have to vote on the motion as amended.

*Member:* What is the motion as amended.

*President Sommer:* That the delegates go untrammelled and free. Is that correct?

*Dr. Pollak:* No, I thought that the amendment was that these resolutions be submitted to the delegates from New Jersey to the A. M. A. for their best judgment in the matter.

*President Sommer:* That is it. They are free, aren't they?



The question was put on the motion as amended and carried.

*Dr. Edward G. Waters:* What I am going to say has been largely prefaced by the remarks of the speakers in conjunction with the motion and the amended motion. At the meeting of the Second Judicial District, in response to a request made at a previous meeting, I presented a plan for proper accrediting and control of specialists and specialism by the State Medical Society. This, you see, is entirely different from the motion as brought up a moment ago. I don't need to go into any detail regarding the need for some action by the State Society on this matter.

If you have, as you have, been acquainted with the number of bills that have been introduced into the Legislature in an attempt to have them enacted as laws to control what we will and what we may not do as practitioners of medicine. I would say this plan is one for the control, by the State Medical Society, of specialists and specialism within its own ranks. I am going to give it to you just as it was presented at the Judicial District Meeting, and just as it was passed and recommended by that group that it should be presented to you.

#### **Plan for Proper Accrediting and Control of Specialists and Specialism by the State Medical Society**

##### *I. Formation of a State Committee on Credentials for Accrediting Members for Special Practice.*

(1) Subsidiary county committee on credentials. These will refer approved applicants to the state committee on credentials for action.

##### *Possible formation of committees:*

State—President, ex-officio, the Chairman of the State Society Welfare Committee, Chairman of State Publicity Committee, Chairman of Board of Trustees, and a member of the State Board of Medical Examiners.

County—12 members, with the President ex-officio. Members to be chiefs of departments or ranking attendings in the respective hospitals, and members of the colleges or groups now nationally accrediting their respective members for special practice, divided as follows: Surgery—2; Medicine—2; Obstetrics—1; Eye and Ear—1; Nose and Throat—1; Roentgenology—1; Genito-Urinary—1; General Practice—1; Gynecology—1; Pediatrics 1.

##### *II. Requirements for Acceptance as Specialists.*

(1) Those accepted by the respective groups of specialists gathered under the following Societies and Colleges: (a) American College of Surgeons; (b) American College of Physicians; (c) American Board of Obstetrics and Gynecology; (d) American Boards of Otolaryngology and Ophthalmology; (e)

American College of Radiology and the Radiologic Society of North America; (f) American Psychiatric Society.

(2) Accrediting by recognition of experience: (a) Men in practice more than 10 years who have been notably identified with certain branches of medicine and surgery and who are accepted in their communities by their fellow practitioners as competent in the field to which they are giving special attention.

(b) Men in general practice, holding a hospital service in a special branch of medicine, which service is sufficiently active to allow of attainment of a high degree of proficiency in that branch of medicine. The duration of appointment must be not less than 5 years.

(c) Properly qualified and trained men, not classified in (a) and (b); those of ample hospital and post-graduate training, in practice 5 years or more, who furnish proof of qualifications—proof acceptable to the State Committee on Credentials.

##### *III. Distribution of Information Regarding Accrediting of Members for Special Practice and Those so Accredited.*

(1) Newspaper notices—prepared by County Committee on Credentials and certified by the State Committee on Credentials. (2) Radio talks—best through the State Committee. (3) Through the agency of the medical profession—office placards and pamphlets on the subject of "Choosing a Specialist". (4) Display of Certificates issued by the State Society through the State Committee on Credentials for Special Practice. (5) Distribution of information through "Central Information Office" in each county medical district. This may be through (a) Physicians' and Surgeons' Telephone Exchange, or (b) Secretary's Office of the County Society.

This plan contains nothing which might be construed, in any practical manner, as shearing the practitioner of his rights. It in no way prevents the country practitioner from doing emergency surgery or interval surgery which it is his privilege to care for. No legislation is required or suggested. There is no legislative control smacking of interference by demagogues. However, it does definitely permit those qualified and especially adept in certain branches of medicine, to let the fact be known through medical society publicity channels; it will prevent incompetent and poorly trained men from foisting themselves upon the public as specialists and will protect the medical profession from that public criticism which such ill-advised actions induce.

It will not, mind you, prevent any doctor from doing anything he may care to, but, it will prevent him from sailing under false colors, will allow the public some intelligent choice of specialists, and will result in a healthy reaction in the public's attitude toward us for inaugurating a plan so unmistakably for the public's good.

*President Sommer:* It seems to me this is a rather ambitious effort and had better be placed in the hands of some committee for proper investigation and study.

*Dr. Barbarito:* I move that this plan devised by Dr. Waters be referred to the Welfare Committee for more study and that the Welfare Committee make its report at the

next annual meeting, in 1932, of this House of Delegates.

The motion was seconded.

*Dr. Tansey:* This is a nice long report but I see no reason why it should be given to the Welfare Committee. We are going to send a committee to the A. M. A. without instructions and I don't see why 5 good members on the committee already can't act. These suggestions are all right to hand to them, but I see no reason why they should be handed that printed sheet practically telling them what they must do.

*President Sommer:* I am afraid you have misinterpreted it.

*Dr. Green:* I would move you, as a substitute motion, that this communication be referred to the proper Reference Committee, according to our Constitution and By-Laws, which is appointed to consider resolutions.

The motion was seconded.

*President Sommer:* The first motion was not seconded. Dr. Green's motion is seconded to change the original motion, and refer this matter to the Committee on Business. That is, as I understand this motion.

*Dr. Hugo Alexander:* I rise to a point of order. The first motion as made by Dr. Barbarito was properly seconded.

*President Sommer:* I didn't hear it. Who seconded it?

*Member:* I seconded it.

*Dr. Alexander:* It is quite proper for any member on the floor to have any motion referred to any particular committee. It does not necessarily have to be referred to one of the 4 or 5 reference committees. Therefore, the original motion to refer this to the Welfare Committee is a proper motion, in my opinion.

*President Sommer:* Then we have an amendment offered to that motion, an amendment in the form of a substitute, and it has been seconded. We shall vote on the amendment which refers that matter, instead of to the Welfare Committee, to the Business Committee.

*Dr. Alexander:* I rise to a point of order again. The maker of the amendment stated that it was improper to refer that matter to the Welfare Committee and therefore he made the amendment. Am I correct?

*Dr. Green:* No, I didn't mention the Welfare Committee. I simply stated that I would move as a substitute that this be referred to the proper Reference Committee, which is the usual procedure.

*Dr. Alexander:* I stand corrected.

*President Sommer:* Now we shall vote on Dr. Green's motion. All those in favor say, "Aye"; contrary, "No". We will have a

standing vote, as I am in doubt about the result. All those in favor, will rise; this is on the amendment made by Dr. Green.

*Member:* Will you explain that amendment again?

*President Sommer:* This is to refer to the Business Committee.

We count 22 in favor of this amendment, and 23 in opposition, so it is lost.

Now we shall put the original motion. This motion is to refer the matter to the Welfare Committee for consideration.

The question was put and the motion carried.

*President Sommer:* The motion is carried that this matter is to be considered by the Welfare Committee. Is there any other new business?

*Dr. Theodore Teimer:* In view of the advanced hour, I am going to simply present a motion with a very few words of introduction. It is a matter in which there will not be any disagreement, I am sure. Maternal Welfare has been taken care of by the Essex County Committee and Society since 1923. In March 1923, the County Society organized a subcommittee, under the name of a "commission", which was charged with the duty to organize and follow the activities which were subsequently described in the Journal of December 1924. I intended to give the gist of this but it is rather late and I shall hope that in the next Journal reports of the proceedings of this meeting will include the resolutions under which this original activity of the Essex County Medical Society was passed.

There is hardly any room for controversy, so I shall present this motion which was passed upon by the Essex delegation.

*President Sommer:* May I interrupt to say that there are no members present from Cumberland, Cape May, Gloucester and Sussex Counties at the meeting of the Nominating Committee. Are there any members at all present from those counties?

Dr. Way, you may represent your county, Cape May, in the Nominating Committee. Is there anyone here from Cumberland or Gloucester or Sussex?

*Dr. Teimer:* I move that the Medical Society of New Jersey create a Committee on Maternal Welfare, which shall be charged with the duties:

(1) To promote in each county of the state the establishment of a Maternal Welfare Commission by the component county society, to be known as the Medical Commission for Maternal Welfare of the County of..... (follows the name of the county), which shall be composed of member physicians and be charged with the duty to promote the cause of maternal welfare within



said county, and which shall exercise authority solely by power delegated by the respective county societies.

(2) To coördinate the efforts and activities of these Maternal Welfare Commissions.

(3) To submit to the State Society an annual report on its activities and on the state of maternal welfare, with any recommendations that it may wish to include.

The committee shall consist of 5 members, who shall be appointed by the President of the State Society for the term of 1 year.

This motion was endorsed by the Essex County Medical Society and I wish to call attention to the successful work that the Medical Commission for Maternal Welfare has done in Essex County: in lowering the maternal mortality; increasing the efficiency of physicians treating and delivering women; lowering the infant mortality and giving adequate care to their charges. We have been able in Essex County to enlist the coöperation of the communities to a very large extent and it is to be hoped, in view of the great attention that is paid by the state as well as by the nation to the lowering of maternal mortality, that this work will be carried on by the other medical societies throughout the state so that lay organizations shall not become the leaders in this field.

The motion was seconded.

*Dr. Frank W. Pinneo:* The Essex County Society simply endorsed this to send it to the House of Delegates as a reasonable addition to the State Society's activities, and the idea was that a State Society Committee was the means through which the counties might be interested. They are also encouraged to this idea of maternal welfare because the success of Dr. Hoyt, in 1892, became not only statewide but country-wide and of permanent value.

*Dr. G. V. Warner:* If I understand correctly, this is to take from lay organizations the question of maternal welfare and place it in the hands of the medical profession. If that be so and it can be done, it is one of the most wonderful things that has ever been promulgated. However, in the County of Monmouth, we are face to face with a lay organization of the greatest political possibilities that any man can conceive, and if this plan is to take away the maternal welfare from the social service organizations of Monmouth County, we wish the men from Essex would come down and help us do it.

The question was called for.

The question was put and the motion carried.

*Dr. Joseph Schapiro:* Mr. President, I, too, have a set of resolutions to offer, which reads as follows:

*Whereas:* (1) The large number of children entering the schools each year who have demonstrable physical defects, evidences the need of having all children of preschool age carefully examined, and sufficiently in advance of their entrance to school, so that correctible defects may be treated and the child put in the best physical condition to get the most from his schooling with the least damage to his health, and, whereas,

(2) The resultant loss of time and delayed educational progress caused by illness due to neglect to correct physical defects amenable to treatment, is unfair to the child and a great economic waste, and, whereas,

(3) The school days lost, to correct defects after entrance to school, which could have been treated a few months earlier with added advantage to the child, is an indefensible waste of valuable time, and since,

(4) It is generally recognized that the physician who has treated the child during early childhood for the usual illnesses of childhood is best qualified to make this complete examination and advise as to treatment for defects found, and, whereas,

(5) It is our wish to coöperate with the various school authorities and medical directors and inspectors of the schools of New Jersey in every reasonable way, in an endeavor to improve this situation, and since,

(6) We feel that it is not the function of school systems through their medical inspectors to examine children who are not actually attending school, therefore, be it

*Resolved:* (1) That the Medical Society of New Jersey recognize the need of an increased interest and understanding on the part of parents, of the value of examination of children of preschool age.

(2) That this society wishes to coöperate with the various school authorities and established health agencies of the state in bringing to the attention of the public the necessity for these examinations.

(3) That for the reason above set forth, the examination of children of preschool age can, to the best advantage of the child, be cared for by existing agencies; i.e., private physicians, and in the case of those unable to pay, by established clinics.

(4) And, convinced that it is not the legitimate function of the schools to engage in this medical activity, other than for proper publicity to show its need and value; therefore, be it further

*Resolved:* That no members of this society, in their capacity as medical directors or inspectors of the school systems of the various counties of the state, shall engage in the examination of any children until they are actually attendants of school; and be it further

*Resolved:* That the several Boards of Education of the counties of this state, and all County Societies, be officially notified of the action of the Medical Society of New Jersey relative to this matter.

*Dr. Schapiro:* I move the adoption of these resolutions.

The motion was seconded.

*Dr. Philip Marvel:* May I amend that by moving that they be referred to the proper Reference Committee? It seems to me that propositions of this sort, and many others, would benefit greatly if referred to our Ref-

erence Committee or to our Business Committee, under whichever jurisdiction it comes, and let that Committee thrash out the problem, and let those individually interested appear before that Committee and present their points, and others present the opposition, and then let the committee report back at the next meeting of this House of Delegates. Then you would have substance upon which to act and you would know something more about the merit of the question.

*Member:* I will second that motion.

*President Sommer:* It has been moved and seconded that this communication be referred to the Reference Committee on Business, to further study this problem and report next year.

*Dr. Marvel:* Report at your next meeting of the House of Delegates, which will be some other day this week.

*Secretary Morrison:* The only business at that meeting is the election of officers; better say at a subsequent meeting.

*Dr. Marvel:* Is there no opportunity given for matters that go over from this meeting, to be brought up at another meeting?

*Secretary Morrison:* Yes, Dr. Marvel, but the Business Committee has been in session for the last hour and a half and is now ready to report, and this session will probably close in 10 or 15 minutes. If there is another special session of the House of Delegates called, the committee can report at that time. If not, the Business Committee will have to be continued for a year and a subsequent report made at the next annual meeting.

*Dr. Marvel:* My only reason for asking that this be sent to the Reference Committee is that these questions cannot be properly discussed and passed upon on snap judgment. No one can follow the reading of such resolutions and determine exactly what is for the best interest of the individuals for whom the resolutions were made. Only through proper investigation and study can we come to a conclusion that is going to be advantageous, and that is why I thought this resolution should be referred to the Business Committee for its report back to the House of Delegates, and then we could take up the matter from an intelligent standpoint.

*President Sommer:* The Chair admits he doesn't understand what it is all about. All I can figure out is that it is something about the examination of preschool children now being undertaken in various parts of the state, and the idea of this resolution is to have the State Society go on record as being against preschool examinations being made by the school physicians.

*Dr. Waters:* I don't think the President

has gotten the idea. I won't repeat the motion but I do believe that Dr. Schapiro, who presented it, probably had some such action in mind as Dr. Marvel has suggested, and that his idea probably was to provide for consideration of a matter that will become very important to us in the next few years so that this body may act on it properly.

*Dr. F. J. Quigley:* I think Dr. Marvel's idea is perfectly sound. The only question that I want to ask now is—when can we have another meeting of this House of Delegates to hear these reports?

If it is in order at this time, I would move that the House of Delegates meet tomorrow afternoon at 5 o'clock. I think that would be after the Scientific Session.

*Dr. Warner:* I hate to get up and talk all of the time, but Dr. Marvel's idea is in accord with my own views. I don't believe in too much haste and I think if this is referred to this Reference Committee, as his motion stands, and if it stands over for a year and the County Societies throughout the state are enabled to consider this thing, then you will know just what you are doing.

It may not be news to some of the men here, but we in Monmouth County have been through this siege of forced action during the past 10 years and, as President of the County Society back in 1922-23, I remember that we had just such things pushed at us and we were not given time to discuss or digest them before they were enacted, and the social service organization of this county put them into effect without any reference at all to us, and it took us a number of years finally to work out these things, and now we are beginning to get them back and because we are beginning to get our forces at work is just the reason that some of these things are looked upon by that Association with a great deal of pleasure to the extent that any legislation or any resolutions are taken up immediately by them and forced through without any consideration whatsoever, and before we turn around and hastily enact something for somebody else to do, it seems to me we should consider them very, very well.

*Dr. Alexander:* I rise to a point of information. I think we are all in hearty accord with Dr. Marvel's motion but I think there seems to be a little misinterpretation on the part of our Secretary as to the time when the Reference Committees are to report. According to the Constitution, let me read Section 12:

"Immediately after organization in the House of Delegates at each annual meeting the President shall appoint from the members of the House, Reference Com-



mittees of 5 members each, unless otherwise provided, to serve during the session at which they are appointed. To these committees may be referred any reports, resolutions, measures or provisions which have been presented to the House. When a matter is referred to any such committee it shall meet forthwith, discuss the question referred, hear debate thereon by any interested member of the society, and shall submit its recommendation at the next session of the House for action."

Therefore, if Reference Committees have been appointed, if matters have been referred to those Reference Committees, provision must be made during this session for those Reference Committees to report.

I said, I rose to a point of information. I think that is a very important point to have cleared up before we vote on Dr. Marvel's motion.

*President Sommer:* The Chair will rule that we shall hold a meeting tomorrow at 5 p. m. if we have a quorum present.

Now we shall vote on Dr. Marvel's motion, that this paper of Dr. Schapiro's be referred to the Committee on Business.

The question was put and the motion carried.

*President Sommer:* I shall rule then, that to consider such matters, the House of Delegates shall meet at 5 p. m. tomorrow.

*Dr. Harry J. Perlberg:* Mr. President, this resolution is prompted by the fact that in those cities adjacent to New York many injured workmen have been compelled to go to New York for treatment, this compulsion being on the part of the various insurance companies. This resolution is as follows:

*Whereas* employees residing and injured in the state of New Jersey, and under the jurisdiction of the compensation laws of this state, have been treated by physicians of other states; and

*Whereas* those employees have been forced to travel great distances and many times forced to pay traveling expenses while receiving treatment; and

*Whereas* the physicians starting treatment of these patients were often caused the annoyance of having these patients taken away from them by some insurance carrier; and

*Whereas*, we believe that both the public and physicians should be protected in this serious problem; be it

*Resolved* that the Welfare Committee study and recommend, and take suitable measures, with the object in view of having employees, injured and residing in the state of New Jersey and under the jurisdiction of the Compensation Laws of the state of New Jersey, treated during the entire course of treatment by physicians practicing in the state of New Jersey.

I move the adoption of this resolution.  
The motion was seconded.

*Dr. Warner:* That subject was taken up by another committee this morning and it was referred to the Business Committee, and I believe it doesn't require any further action at present.

*President Sommer:* I think, myself, the Secretary discussed this matter of lifting cases this morning. Does not that cover the same subject?

*Dr. Schapiro:* A point of order on the reports handed in this morning. We simply received the report but no action was taken by this House of Delegates. Nobody had a chance for discussion.

*Secretary Morrison:* I will say, for the information of the delegate talking, that those matters were referred to the Business Committee and when you get on far enough to allow the Business Committee to report, it will report.

*Dr. Schapiro:* I understood the session was going to close in 15 minutes.

*President Sommer:* This particular subject is in the hands of the Business Committee and it has a report ready for us to listen to, I believe.

*Dr. Schapiro:* Will the Business Committee report now?

*President Sommer:* You will stay here now until this session is ended. The only business we have tomorrow is the consideration of one particular thing at 5 o'clock.

Are you ready to report for the Business Committee?

*Dr. E. J. Marsh:* Your Committee has considered the various recommendations included in the reports of the officers and has unanimously agreed to the following recommendations.

In the report of the President, he recommends, first, that there is a question regarding certain unsatisfactory features of the Workman's Compensation Law which should be referred to a special committee appointed to study all phases of that problem; likewise, the questions of "contract practice" and of "industrial medicine" seem to call for the appointment of special committees of investigation. We felt that there is a good deal in common in these 3 subjects, and we felt that it would be well to endorse the suggestion and recommend its adoption by the society, that a single committee be appointed large enough, however, to be divided into subcommittees for the consideration of these 3 questions and then to coördinate on such points as are in common regarding these subjects.

We offer that for your approval, as the first recommendation.

*President Sommer:* This first portion of

the report of the Business Committee is now ready for discussion.

*Dr. Quigley:* I move that the recommendation of the committee with regard to this subject be endorsed and that the Chair appoint a committee in conformity with the suggestion made.

The motion was seconded and carried.

*Dr. Marsh:* On the recommendation of the Secretary, that the State Society adopt a resolution or By-Law ordering the Component Societies to include in their By-Laws a provision governing and controlling contract practice, and similar resolution or By-Law dealing with case lifting, your committee, Mr. President, was not wholly in favor of ordering Component Societies to do certain things. We were in favor of the principle of the suggestion, but we thought it wiser, as the Component Societies are composed of rational persons, to refer this matter to the Judicial Council with the request that its members take this up, each in his own Judicial District for consultation with the Component Societies rather than order such societies to do thus and so.

*Dr. Warner:* I move the adoption of the resolution and that the recommendation be concurred in.

The motion was seconded.

*Dr. S. T. Snedecor:* I would like to inquire the import of that resolution?

*Secretary Morrison:* I should say, listening to the report from the Business Committee, that the matters of "contract practice" and "case lifting" shall be discussed by the Councilors in their respective districts, in each Component Society constituting that district, and a suggestion be made to them individually to make provisions for taking care of these 2 subjects.

*President Sommer:* It has been moved and seconded that this report be received and its opinion concurred in, and that the matter be referred to the Judicial Council. That is my understanding. This matter would then be placed in the hands of the Judicial Council.

*Dr. Schapiro:* In the first place, I think the second recommendation is unnecessary. In your first action all matters pertaining to compensation legislation are referred to the Welfare Committee; now, you are coming along with another recommendation to pass it on to the Council.

*President Sommer:* This is not a compensation matter. This is "case lifting" we are arguing about.

*Dr. Schapiro:* That is the same thing, for it has reference to compensation work. As to the second feature, I don't see why the Councilors and the Component Societies

should have the final say in this matter. The State Medical Society decides what are the qualifications for membership in the State Medical Society and we should decide right here concerning such qualifications. If we decide that a man who does contract work is not eligible for county society membership, that is the end of it. But why pass the buck?

*President Sommer:* I don't think we can decide that question, as to ethics of contract practice, here without proper study of the matter. I will ask Dr. Marsh to give us that resolution again.

*Dr. Marsh:* That the State Society adopt a resolution or By-Law ordering the Component Societies to include in their By-Laws a provision governing and controlling "contract practice" and a similar resolution or By-Law dealing with "case lifting". The recommendation was that the matter be referred to the Judicial Council, with the request that the Councilors take up for consideration, each with the counties in his own Judicial District, and urge on them the passage of such a By-Law.

*Dr. Schapiro:* I will move to amend by substituting the word—what is the name of that committee?—refer it to the same special committee on Compensation Work.

*Dr. D. L. Haggerty:* We had a little discussion about that in the Business Committee and it was brought out that this question differs in different counties, and it was better to leave the question for settlement with the separate counties under Judicial Councilors.

*Secretary Morrison:* In presenting these 2 subjects this morning for your consideration, I had in view the fact that we have considerable house cleaning to do and that most of the trouble circulates around "contract practice and case lifting". Under the regulatory powers given to the State Medical Society in its Charter, we have the power to enforce such rules and regulations for the management of the concerns of this and the component societies as we see fit, and it seems to me perfectly legitimate, and at this time advisable, that the State Society pass a By-Law covering both of these matters, and enforce upon the Component Societies the necessity of incorporating such a By-Law. If you disagree with that view or think it is unwise, think it is not politic, very well.

*Dr. Marsh:* With the committee, it was not question of authority but the question of policy.

*Dr. Warner:* Mr. President, as you yourself are aware, Mercer County and Monmouth County have passed a By-Law which covers a part or all of this question under controversy, and for that reason I think it



would be more, shall I say feasible, to refer that to the Judicial Districts, allowing the Judicial Councilors to take care of that matter in their different sections. We of the central district of the state have different problems than those in Hudson and Essex Counties on this question that is under debate. So it is in the southern part of the state; they have a different problem to deal with and it would seem to me far more feasible to leave that under the action of the Judicial Councilors of the different county societies rather than referring it to any special committee to act for the entire state. I would, therefore, rather see the amendment voted down and the original motion adopted.

*Dr. Alexander:* The point is, as I see it, we would be much wiser to concentrate this entire problem in the hands of this one special committee. They are only going to make recommendations. If they see fit, after a careful study of the entire matter, compensation problems, contract problems, case lifting problems, they are going to recommend to this organization that it be taken up in the Judicial Districts; that would settle the entire matter. But at the same time if one committee has all of the facts on hand it can very much more readily discuss it intelligently, and come to an intelligent conclusion more readily, than if you split it between 2 committees. If they recommend afterward that the wisest course to follow would be to refer that to the Judicial Districts, all right, they can do that next year. In the meantime, if it is all in the hands of a single committee, of course unified action on the part of that committee, and definite recommendation of the entire state organization, could accomplish a definite purpose very much more worth while than to split it up and have separate recommendations made by different committees.

*Dr. Pagliughi:* It seems to me that 2 separate subjects have been brought up as 1 by the Business Committee, and I think that ought to be explained a little more clearly. There is no connection, in my mind, between "contract practice" and "case lifting", and I think they should be differentiated, and surely no harm will come from more study. I think there can be no harm in referring it to the Welfare Committee.

*President Sommer:* There is a motion made to refer this matter to the Judicial Council for action. That has been seconded. There is an amendment to refer it to the Special Committee that is to study the Workman's Compensation Act and other things.

*Dr. Schapiro:* That is the amendment and it has been seconded.

*President Sommer:* We shall vote on the

amendment. Those in favor of putting this matter of "case lifting" and "contract practice" into the hands of the Special Committee, will say, "Aye". Opposed, "No". I would like to have a rising vote.

A rising vote was had.

*President Sommer:* Those voting for the amendment have the verdict.

Now we vote on it as a whole.

The question was put and the motion carried.

*Dr. D. L. Haggerty* (speaking in place of Dr. Marsh, for the Business Committee): The next question concerns the resolutions submitted by Dr. Reik.

*Whereas* it is a growing practice among commercial advertisers to use the alleged endorsements of physicians in such a way as to mislead the public and misrepresent medical opinion; and

*Whereas* in promoting the sale of cigarettes and cigars, especially, this type of advertising is widely used to create the belief that physicians actually prefer and recommend certain brands of these products as aids to health; and

*Whereas* in the opinion of this body no reputable physician would knowingly grant the use of his name or his authority to foster such a false impression; therefore, be it

*Resolved* that the New Jersey Medical Society in convention assembled condemns such advertising and urges its refusal by all publishers and others in control of advertising media; and be it further

*Resolved* that this society calls upon physicians everywhere to guard their own reputations and the reputation of their profession by refusing to permit such misleading and unethical use of their names or opinions.

These resolutions were endorsed by the committee.

*Member:* I move its adoption.

The motion was seconded and carried.

*Dr. D. L. Haggerty:* The next point is that the Business Committee endorses the motion of Dr. Reik suggesting that the Woman's Auxiliary, in conjunction with the Special Committee to be appointed by the Trustees to confer with it, be authorized to conduct a campaign against fraudulent advertising of all sorts.

*Member:* I move that it be adopted.

The motion was seconded and carried.

*Dr. Haggerty:* The Committee endorses the suggestion made by Dr. Fuhrmann at the Conference of County Society Secretaries and Reporters, to appoint a committee to study the problems of state medicine, that is, national health insurance and the like, said committee to consist of a member from each Judicial Councilor District, with the President and Secretary ex-officio members.

*Dr. Marvel:* I move its adoption.

*Dr. Schapiro:* I would move its adoption but I don't see the necessity for it; state medicine

is here but we are not getting paid for it, that is all.

The motion was seconded and carried.

*Dr. Haggerty:* We recommend endorsement of the address by Dr. Reik, outlining the policy of coöperation with lay organizations based on the idea that strictly medical problems should be left entirely in the control of medical men.

*Member:* I move its adoption.

The motion was seconded and carried.

*Dr. Haggerty:* The next is a recommendation of Dr. Reik's proposal that a committee be appointed to visit the Motor Vehicle Commissioner and insist that applicants for auto-driver's license be required to pass a physical examination of more rigid character than is now used.

*Dr. Warner:* I move its adoption.

The motion was seconded and carried.

*Dr. Haggerty:* Next, we recommend that the Welfare Committee, at the opportune time, consider submission to the legislature of an amendment to the Hospital Lien Bill to make that law cover doctors and nurses.

*Dr. Warner:* I move its adoption.

The motion was seconded and carried.

*Dr. Haggerty:* Next, we recommend that the Welfare Committee consider, at the opportune time, amendment of the Medical Practice Act to include the appointment of a Grievance Committee on the order of the one operating in the state of New York.

*Member:* I move its adoption.

The motion was seconded and carried.

*Dr. Haggerty:* The next resolution was that a committee be appointed by the Chair to consider the qualifications for specialists and the proper way to take care of that problem.

*President Sommer:* I think that subject has been discussed enough and better be left in the waste basket.

*Dr. Haggerty:* The Business Committee recommends that a public health committee be appointed to confer with the State Board of Health, and other public health authorities, on the revision of health laws.

*Member:* I move its adoption.

The motion was seconded and carried.

*Dr. Haggerty:* We recommend a uniform application blank for membership, to be used by the county societies, to conform with the requirements of the State Society, that in all cases use shall be made of the A. M. A. biographic records.

*Member:* I move its adoption.

*Dr. Warner:* Isn't this already taken care of in the By-Laws of the State Society?

*Secretary Morrison:* Mr. Chairman, when I came into office in 1923, there were handed

over to me by Dr. Chandler a number of application blanks that had been adopted some 10 years prior to that time. The county societies then were using them, but during the past few years many of the county societies became dissatisfied with that form and set up printed application blanks of their own containing many other features, and have the applicants sign their own individual blanks. This is a question of whether or not the State Society should adopt a uniform blank, after a conference with the county societies, and make that a blanket form of application for membership in the State Society.

*Dr. Marvel:* I move its adoption.

The motion was seconded and carried.

*Dr. Haggerty:* The twelfth item is, that we endorse the general plan of holding joint meetings of the county societies in the Judicial Councilor Districts.

*Member:* I move its adoption.

The motion was seconded and carried.

*President Sommer:* I have a report here from the Committee on Mental Hygiene, sent in by Dr. E. C. Jackson, who found it impossible to come to this meeting.

#### Report of Special Committee on Mental Hygiene

The Mental Hygiene Committee of the State Society wishes to report progress to the House of Delegates, and asks that the committee appointed by Dr. Sommer be continued in order that it may carry out the program which was inaugurated last year and a copy of which you have.

E. C. Jackson, M.D.,  
Chairman.

*Dr. Warner:* I move the adoption of the report and the recommendation contained therein.

The motion was seconded and carried.

*Dr. S. T. Snedecor:* Under the heading of new business, Mr. President, at the meeting of the Second Councilor District, March 25, a resolution was passed requesting the State Society to appoint a special committee for the promotion and supervision of County Medical Society publicity. I would make such a motion.

The motion was seconded.

*Member:* I think it would be well to enumerate the number on that committee.

*Dr. Snedecor:* Five?

*President Sommer:* A committee of 5.

The question was put and the motion carried.

*Dr. Frank C. Johnson:* I have a request from the Governor's Conference on Child Health and Protection, held in New Brunswick last March, for the appointment of a committee by this society, by the President, the number is not given so I would suggest



5, to coöperate with the Continuation Committee of the Governor's Conference on Child Health and Protection in a review of the work of the various bureaus of the state that have to do with the health and protection of children, looking toward improvement of their service.

*Dr. Warner:* I move its adoption.

The motion was seconded.

*Dr. Johnson:* This comes out of the Governor's Conference held in New Brunswick last March, which was attended by 1600 people. It was a very important gathering and a very interesting one, upon which I shall read a report on Friday, but that will be after all business is completed. Therefore, this motion is asked for now, together with action on it. That committee might be the same committee just appointed on public health supervision, a review of public health work. I don't see any reason why they shouldn't be the same committee, as so many committees are being appointed now at the discretion of the Chair. So far as I know, it might be the same committee with the idea that the work of the Children's Bureau and other bureaus of the state that are dealing with public health matters may be improved, and this group of people of all sorts, of many organizations, ask for coöperation of the State Medical Society. Such coöperation in the past has not been adequate or extensive. This is an opportunity to work with the groups that are doing a great deal of work, as we all know, in a public health way.

*President Sommer:* Why not amend your motion to instruct that Public Health Committee to take over as one of its activities this particular thing?

*Dr. Johnson:* That was what I had in mind.

The motion was seconded and carried.

*President Sommer:* Is there any other business?

Upon motion, regularly made and carried, the meeting adjourned at 6 o'clock.

#### Thursday Afternoon Session

June 4, 1931

The Thursday afternoon session convened at 2.45 p. m., President Sommer in the chair.

*President Sommer:* The meeting will come to order, please.

President Sommer made several announcements.

*President Sommer:* We are here for the purpose of hearing the report of the Committee on Nominations, Dr. McBride, Chairman.

*Dr. McBride* presented the following prepared report of the Nominating Committee:

#### Report of Nominating Committee

We offer for your consideration the following nominations for Officers and Committees:

President, John F. Hagerty; First Vice-President, Paul Mecray; Second Vice-President, Frederic J. Quigley; Third Vice-President, Lancelot Ely; Secretary, J. Bennett Morrison; Treasurer, Elias J. Marsh.

Trustees: W. P. Conaway to succeed James Hunter, Jr.; Charles Smith to succeed Louis Cook Osmun; Archangelo Liva to succeed Frank C. McCormack; Herbert W. Nafey to succeed Martin S. Meinzer, resigned; Harold Disbrow re-elected.

Committee on Program and Arrangements: Martin W. Reddan to succeed himself.

Delegates to the A. M. A.: B. S. Pollak to succeed himself; E. R. Mulford to succeed himself.

Alternate Delegates: S. B. English to succeed himself; C. B. Smith to succeed himself.

Committee on Publication: Edward J. Ill to succeed himself.

As place of meeting for convention of 1932 we recommend Atlantic City.

*President Sommer:* You have heard the report of the Nominating Committee. Are there any nominations from the floor for any of these offices? As there do not seem to be any opposition candidates to this ticket, will someone make a motion directing the Secretary to cast a ballot for this ticket?

*Member:* I so move.

The motion was seconded and carried and the Secretary cast the ballot of the society for the names as presented by the Nominating Committee.

*President Sommer:* The ballot having been cast for this ticket, by the power invested in me as President of the State Society, I declare them elected. (Applause)

*Dr. Hagerty,* will you allow me to introduce you as the new President.

The convention arose. (Applause)

*President Sommer:* It gives me great pleasure to introduce my successor and my tried and valued friend.

*President-Elect Hagerty:* I am very grateful to you, one and all, for this expression of your esteem. It is very gratifying, indeed, to know that one has the respect and good will of his fellow practitioners.

I am well aware that these compliments, these honors, bring with them responsibilities which are not lessened at all when one reflects upon the good work of his predecessors in the State Society. I can assure you of my appreciation of what this honor implies, and I shall do my best to justify your confidence in me and hope that you will find at the end of a year that your confidence has not been misplaced. Again, I thank you. (Applause)

*President Sommer:* The House of Dele-

gates is now in session and the Business Committee has a further report to make, I believe.

*Dr. Francis H. Todd:* Mr. President and Members of the House of Delegates: The Business Committee makes 2 recommendations: (1) Enforcement of the principle that the preschool child shall be examined, and that this examination shall not be made by the school physician but rather by the family doctor. (2) Recommendation that a special committee of 5 be appointed by the President of the society to coöperate with Dr. Ireland in formulating questions of policy. Dr. Ireland, I believe, has requested this society to have a committee appointed to coöperate with him, with which he can meet to formulate policies that will be agreeable to the medical society of the state in regard to physical direction of the Board of Education of the state.

*Dr. D. L. Haggerty:* I move that this be referred to the Public Health Committee, which has been appointed to confer with public health authorities in this respect.

*President Sommer:* There isn't as yet any such committee.

*Dr. Haggerty:* There was a recommendation that such a committee should be appointed.

*President Sommer:* There are 2 recommendations. It seems to me the first says that we endorse the principle that the preschool child shall be examined by the family doctor, and it will hardly be necessary to pass that on to a committee.

*Dr. Hugo Alexander:* I will move you that the first recommendation be adopted.

The motion was seconded and carried.

*President Sommer:* Now, this second one is a special committee to be appointed to coöperate with Dr. Ireland to formulate questions of policy.

*Member:* I move that this resolution be adopted.

The motion was seconded and carried.

*Dr. F. J. Quigley:* Might I ask with regard to the first resolution whether there was not a set of resolutions which covered this entire proposition? What disposition is to be made of those? Has the Committee on Business any recommendation to make as to whether those resolutions are to be adopted?

*President Sommer:* It seems to me that whole problem will run into Dr. Ireland's problem.

*Dr. Quigley:* No, that has nothing to do with it.

*Dr. Todd:* We have no knowledge of any previous recommendations.

*Dr. D. L. Haggerty:* There was a com-

mittee appointed yesterday to take up this question of public health law revision with the health authorities and to coöperate with them in any matter in reference thereto. That is why I made the motion that this new matter should be referred to them.

*Dr. B. S. Pollak:* This matter seems to be confused in the minds of some of us. In the first place, Dr. Ireland asked for a special committee, as an advisory committee in so far as adopting school health policies are concerned, concerning the handling of the school children. We passed a resolution this morning concerning another committee which shall confer with the Department of Health. And it seems to me that the committee, so far as Dr. Ireland is concerned, ought to be a committee of itself without being associated with the Committee on Public Health.

As far as this question is concerned, about examining children of the preschool age, that is based upon the fact that it has been made more or less popular that the school physician should examine these children. This resolution comes from Hudson County and we feel that the school physician should not be the person who examines these children, and for that purpose we advocated, by resolution and preamble, which Dr. Quigley has brought up, a certain procedure which ought to be part and parcel of the recommendation just brought in by the Business Committee.

*Secretary Morrison:* Mr. President, I think that the matter brought out by Dr. Pollak is very pertinent. The Department of Education, through Dr. Ireland, is coming to us seeking a closer coöperation between his body of school physicians and the medical profession of New Jersey, and he wishes the Medical Society of New Jersey to help him to guide that policy. It wasn't so much the fixing of the matter of sliding fees that these doctors would be paid but it covers the whole policy. We introduced last year a Section of School Physicians and we are trying that out as one of the sections of this society, and now along comes Dr. Ireland wishing to make that tie with the Educational Board closer still. In that problem comes the examination of preschool children, and several organizations in the state, without mentioning them, are attempting to have that work done by the school physician before the child becomes a school child. The place to settle that matter of policy is with this proposed committee, which will coöperate with Dr. Ireland.

*President Sommer:* It seems to me that this new committee that is to confer with Dr. Ireland, and act in an advisory capacity, could take that particular problem in hand.



*Dr. Alexander:* Is there a motion before the house?

*President Sommer:* None at all.

*Dr. Alexander:* You will probably recall that Dr. Schapiro presented a resolution. This resolution was referred to the Business Committee.

*President Sommer:* Is this the resolution?

*Dr. Alexander:* You have now the recommendation, as the report of the Business Committee, on that resolution. In my humble opinion, the function of the Business Committee would be to advise either adoption or rejection, or an amendment of the resolution as presented to the Business Committee. I infer, therefore, and that is why I moved that the recommendation be adopted, that the Business Committee recommended adoption of the resolution as presented. If that is not the case, I now move you, Mr. Chairman, that inasmuch as the Business Committee apparently favors that resolution, the adoption of the resolution as presented by Dr. Schapiro yesterday.

The motion was seconded.

*Dr. Clarence L. Andrews:* That is the resolution we passed on.

*President Sommer:* The Business Committee apparently understands its report is in answer to that matter.

*Dr. Todd:* Dr. Schapiro met with us previous to our meeting this afternoon and after discussing this with the committee, the Business Committee recommends this to the Board of Delegates. This is in accord with Dr. Schapiro's resolution and it is recommended to you.

*President Sommer:* That seems to be an answer to your question.

*Dr. Alexander:* The motion has been made and seconded.

*President Sommer:* Withdraw your motion.

*Dr. Alexander:* To make absolutely sure, I made a motion and it has been seconded. If we pass it, it merely confirms the fact that that resolution has been properly passed.

The question was called for.

*President Sommer:* I don't understand the question.

*Secretary Morrison:* You are acting on the report of the Business Committee, either adopt it or reject it.

*Dr. Alexander:* The motion I made is on the adoption of the resolution.

*President Sommer:* We have passed this recommendation of the Business Committee. Either somebody will have to ask for withdrawal of that, or this motion will have to be withdrawn.

*Dr. Alexander:* I am sorry to be on the

floor so long. The motion has already been made and passed; that the recommendation of the Business Committee be approved. I now, in order to make absolutely sure of adoption of that resolution, have moved again the adoption, specifically, of that resolution, and now that motion has been seconded.

*President Sommer:* I'd like to have it here to read it.

*Dr. Haggerty:* I will second that motion.

*President Sommer:* The new one?

*Dr. Haggerty:* Yes.

*Dr. Schapiro:* That resolution was handed to the Secretary.

*President Sommer:* Yes, we know that. We have it. Is there any further discussion of this? If not, I shall put the motion.

The question was put and the motion carried.

*President Sommer:* Report of the Board of Trustees, Dr. McBride, Chairman.

*Dr. A. F. McBride:* Mr. President, the Board of Trustees wishes to make an additional report to the House of Delegates.

#### Final Report of the Board of Trustees

Asbury Park, N. J.,  
June 4, 1931.

The Board of Trustees has held 2 special sessions during the convention here in Asbury Park, and begs to report the following actions taken:

The report of the Committee on Finance and Budget for the next fiscal year of the society was received and approved as presented before the House of Delegates yesterday by Dr. North.

The report of the Judicial Council, dealing with the method of election to membership in county societies, was received and considered. The perfect eligibility of the candidates referred to having been established, the Trustees request that those physicians be now reelected by the County Society in accordance with the new Constitution and By-Laws of the State Society, so as to settle this specific question satisfactorily and establish a precedent of proper procedure.

Andrew F. McBride,  
Chairman.

*Dr. McBride:* I might say at this time that the Board of Trustees feels that some of the county societies may have elected some members not in accordance with the new Constitution and By-Laws and we just simply are presenting this so that if any such action has been taken, you may correct it. This is a question that particularly concerns Monmouth County and Middlesex County, about the election of a doctor who is perfectly eligible for election but there was some little deviation from the ordinary requirements of the new Constitution and By-Laws.

*President Sommer:* You have heard the report of the Board of Trustees, what is your pleasure?

*Dr. Pollak:* I move its adoption.

The motion was seconded and carried.

*President Sommer:* I should like to have a resolution passed thanking the Monmouth County Medical Society members for their efforts in our behalf during this session, and the hotel authorities for their spirit of cooperation. Will someone make that?

*Dr. Haggerty:* I make such a motion.

The motion was seconded and carried.

*President Sommer:* Is there any further business?

*Dr. Eagleton:* Are we going to have another meeting of the House of Delegates?

*President Sommer:* No.

*Dr. Eagleton:* I'd like to report as chairman of the committee that was discussed in Dr. Morrison's paper. Was that report presented yesterday?

*Secretary Morrison:* There was no report.

*Dr. Eagleton:* Could I offer the report? At the last annual meeting Dr. Morrison read a paper about the ethical standards of men who were engaged in contract practice, and the relationship of the physician with industrial insurance companies and industrial business generally, and the President, Dr. McBride at that time, appointed me, Dr. Donohoe, Dr. Todd and several others whom I do not remember at this time—there were five. We had a meeting in Newark, and copies of the address of Dr. Morrison were sent to each member of the committee, and we asked each to think it over during the summer.

We had another meeting in Newark at which we asked a representative from all of the different hospitals of the county to meet with this Special Committee. The general opinion was that we are living in a new age; that there are a large number of men who have entered upon industrial work; that in the exact reading of the code of ethics these men are not ethical, but that it is a new condition and should be discussed and new provisions made, but this principle must be enunciated in all of the relations with all physicians, with the industrial corporations; that the Medical Society of New Jersey should stand behind the principle; that the injured man has a right to ask for his own physician and to be treated by him; and that is the principle we stand on. Is not that the idea, Dr. Haggerty?

*Dr. Haggerty:* Yes, I think so.

*Dr. Eagleton:* It was impossible to get any general consensus of opinion. We had 13 representatives of different hospitals present but that was the principle, that the injured or sick man should have the right to have his own physician. Since that has occurred in Newark, the taking of the case by the insurance company and putting it in the

hands of its physician, it has taken a very important place in several of our hospitals, and I think that the whole subject should be discussed by this House of Delegates.

*Dr. Newcomb:* May I just say a few words about legislation?

*President Sommer:* I'd like first to get this business finished.

*Dr. Eagleton:* It is only a matter of the report of the committee.

*President Sommer:* It is simply a report then, and no action is necessary?

*Dr. D. L. Haggerty:* This matter was taken up yesterday by the Business Committee and referred to a special committee. We have already duplicated that in several reports and I don't see any reason for going further with it. I think his recommendations are very intelligent and that they should be presented to the committee in charge of that matter.

*President Sommer:* I think a motion is in order to adopt Dr. Eagleton's report.

*Dr. Haggerty:* I make a motion that it be adopted and referred to the committee on contract and industrial practice.

The motion was seconded and carried.

*President Sommer:* Dr. Newcomb!

*Dr. M. W. Newcomb:* Mr. President, I just want to say a few words regarding legislation and a few impressions that I have gathered in the legislature after 4 years of service. You all know that we had the usual number of bills introduced this year. They were all but one referred to the Public Health Committee. One chiropractist bill was referred to the Miscellaneous Business Committee and that is the only bill that was reported out. That bill was put on the board for a third reading and final passage 5 times and we succeeded repeatedly in having it taken off, and it never came to a vote although I remained there until 3 or 4 o'clock the last night of the session expecting it would be trotted out at the last minute.

We have been very successful in these past 4 years at least, and before I was a member of the Legislature, and I am not taking any credit for what's been done, neither am I criticizing anybody for the way we are handling legislation. But it seems to me that we can't go on indefinitely and not have some of these bills reported out, because the speaker or some of the other men who are against the medical profession, are going to see that the public health committee has appointees that will do their bidding. Now, for the last few years we have had a Chairman of the Public Health Committee who would not report a bill out unless I signed it and, as you know, I will not sign any bills that are against the medical profession, but how long we can keep that up



is a question and I think that the one bill that was reported to the Miscellaneous Business Committee is perhaps the beginning of the end of some of these bills being referred to the Public Health Committee unless packed so it will report them out. As one former member of the Assembly said, "If you medical men aren't interested enough in your own legislation to come to me and other members of the Legislature or have your representative come to me and explain the merits for or against this bill, then why should I be interested in it? Why should I even think about it; if you men whom the bill affects aren't willing to take the time or aren't willing to have someone come to me and other members of the Legislature and talk over things for and against these bills, why should we bother with them?" Coming as that did from a member of the Legislature, I think we should recognize the importance of it. It seems to me that we must cease to be just doctors, working at home and not paying any attention to laws or anything like that. We must be interested in all these things. While politics may be dirty, and are dirty much more than they should be, it seems to me we have to take an interest in them if we expect to prevent some vicious bills passing our Legislature. I don't believe there is any question about it. It seems to me we should have someone that is in personal touch with these members of the Legislature. I don't think we can do all this by letter writing from Atlantic City or Camden or any other city. I think it is the personal touch that does much more than just a few letters written regarding a certain number of bills.

I am simply giving you my experience in 4 years and I am willing to do everything I can, and will do everything I can, but I can't, nor can any doctor—Dr. Hargrave has been working with me—and the 2 of us can't do all the lobbying for the state of New Jersey, the State Medical Society, in Trenton. I don't know of any legislation that gets through if there isn't some lobbying, if you want to call it lobbying. It may not be dignified and it may be this, that and the other, but nevertheless the old age pension bill was passed with lobbying from the first day of the session until we passed it. The majority of the members of the Legislature are against us on public health lines and for medical bills and it seems to me we should have someone, and I think from my standpoint that the Board of Trustees ought to consider this question very seriously, because I believe in the next 5 or 10 years there are many serious problems that are going to face the medi-

cal society and the medical profession of the state of New Jersey.

*Dr. McBride:* Mr. President and Members of the House of Delegates, I am sure that every officer of this society, every member of the Welfare Committee, sincerely appreciates the efforts made by the medical men in the House of the Assembly, Dr. Newcomb and Dr. Hargrave, together with the wonderful work done by Dr. Cole in the Senate. Having spent several years as Chairman of the Welfare Committee of the State Society; having been a member of that committee for a great number of years; having watched the changes that have taken place, knowing that the Medical Society of New Jersey never asked for a thing it didn't believe the public was entitled to; I say to you that the only way I can see that we can effectively get what the public is entitled to in that particular question of public health, is by having the members of this society approach their representatives in the Legislature at home. I am unalterably opposed to any lobbying in the State House. To me, it is absolutely as unethical as it is to do contract practice, and I am seriously opposed to it; and I think we shall never be right when we engage in that type of practice. I believe we know the members of the Legislature from our respective communities. They know us, and it is the duty of every county society to have an active local Welfare Committee, if you will, or Public Relations Committee, or whatever you choose to call it, so that it may get in touch immediately or can sit down with its respective representatives and discuss legislation; if unable to show members of the Legislature the reasons why they should vote for or oppose bills, in the interest or against the interest of public health, then I believe that particular county society hasn't appointed the right committee.

I hope the time may come when more doctors will accept places in the Legislature, but whether that comes about or not, I sincerely believe that we shall make a mistake if we appoint, either by voluntary acceptance on the part of some physician, or, if we pay, some lobbyist for this work. I think that would be a serious mistake. When any crisis arises, I believe any member of the State Society should go to Trenton if necessary. I believe there ought to be a hearing on all bills reported out of committee, or about to be reported out, affecting public health, but I do hope the Medical Society of New Jersey will never appoint any paid lobbyist or have any member of the profession constantly or continuously in the halls of the Legislature.

*Dr. Pollak:* As I took occasion to say yes-

terday, when commenting upon the report of the Welfare Committee, I think, disregarding what Dr. Newcomb may have said concerning his own efforts in the Legislature, that we officially, as members of this State Society, ought to pay him tribute for the work he has done because I know personally the efforts he has made in reaching us, for instance, in Jersey City, regarding our delegation, very many times asking us to ask the members from Hudson County who happen to be on the Public Health Committee to support him in keeping certain bills in committee. For this, and many other reasons, I move that this society acknowledge a debt of gratitude to Dr. Newcomb for the work done.

*Secretary Morrison:* I have great pleasure in seconding that motion. We all of us realize the great sense of obligation we owe to every doctor who proves himself willing to serve the people of New Jersey and serve the profession in the Legislature, and I appreciate just as highly as anybody in the room the services that Dr. Newcomb and the other physicians there have given us, but I want to call your attention to the fact that the medical profession should hold itself above the line and level of benefit seekers who secure legislation by lobbying. I want to call your attention to the fact that in some of the counties the Welfare Committee of the county society seeks a conference with the local Assemblyman from that county, at home, and there they go over all bills that affect the public health, and they are discussed not from the attitude of the profession but from the effect those bills are going to have upon the health and welfare of the people of New Jersey. Those men know, then, what our Welfare Committee thinks and what the profession thinks about it. If I were a member of the Legislature and a bill was up for third reading, and a doctor came in and buttonholed me on the floor, I'd tell him where to go. For the past 6 years we have been told half a dozen times by legislators that they do not like lobbying at Trenton. So, if we can secure the support of the Legislature by the dignified method outlined by Dr. McBride, and we do, as the results show, then we are following a far better course.

*Dr. Newcomb:* I don't think it is any better for Dr. McBride or any other medical man to do the lobbying in the New Jersey State Assembly than it is for me. I have to do it. I have to take a list of the members of the State Legislature and go around and check them off, "Aye" or "Nay", against these bills. Why should Dr. Hargrave or I have to do this? Why can't we have someone to help us there? We can't wait until

a bill comes up for third reading to know whether anybody is going to support or defeat that bill. If we do, where are we going to be? We have to go around and talk to the different members and see what their opinions are and see what they are going to do on the different bills. You can call it undignified, or lobbying, or anything you want, but that is what you have to do if you want to know what is going to be done before the bill is called for third reading and final passage.

*Secretary Morrison:* And which will have a greater effect, if a delegate from a county meets that man at home or in his office where, removed from the turmoil and influences of Trenton, they can go over the bills and find out where he stands, or this other method? Which will have more effect on that man?

*Dr. Newcomb:* They don't do it.

*Secretary Morrison:* They should do it.

*Dr. Newcomb:* They should but they don't. But if it is the consensus of this meeting that they don't want me to go around, that it is undignified and beneath my dignity—I am certainly pretty well down if it lowers my dignity—I will sit in my seat and then let the members of the counties do it and see where some of your legislation goes.

*Dr. D. L. Haggerty:* I'd like to support Dr. Newcomb's remarks in that in the last 4 or 5 years it was only through his efforts and the efforts of Dr. Cole that we were able to stop this legislation, and it is not going on forever. These bills have been referred to his committee and they have been able to stop them. If it was not for them, we would just be up against it, that is all, and we can't keep on going that way. If a bill comes up and they have the proper incentive behind it, they can put it through in one night, turn it over to the Senate and push it through and get it to the Governor before you know it, and if we think we can stop it then, why we are just out of luck.

In this last year, I have been referred to as a voluntary assistant in this. I wasn't voluntary; I was just worked into it and I don't expect to keep on forever, and you are going to have to figure out a way of doing this sort of work. The only way I see is that you get more medical men into the Assembly, or that you have a manner of treating these bills otherwise. You can't expect the medical men to get in touch with their representatives; after this bill has gotten the proper shove, it is just too late, that is all.

*Dr. McBride:* I don't know who is entitled to all of the credit for the failure of some of these bills to pass during the last 4 or 5 years. I do know this society has had a very active, very painstaking Welfare



Committee. I *do* know that every county in the state has been represented on that Welfare Committee. I *do* know that the Welfare Committee considered every bill introduced in the Legislature concerning health matters. I *do* know that every member of the Welfare Committee has been notified at the meetings and has agreed to see the respective representatives of the county societies.

I believe that, if I were a member of the Legislature, as Dr. Newcomb is—and I appreciate all he has done and am very grateful as an individual member for all he has done—and a doctor as well, I'd expect to inquire very carefully into every bill that had anything to do with public health, and I would expect to use every effort I could to further that bill—if it was in the interest of the public health, and I would expect to do everything I could to defeat that bill if it were not—if I had to go from member to member as he describes it, for I think that is the duty of every legislator, whether he be doctor or lawyer or whatnot. That is my position about legislation and members of the Legislature. If we have to lobby to influence legislation then we had better all go Bolshevik. That is rather harsh language but that is the way I feel about it.

I want to say that Dr. Haggerty, of Mercer County, has done a lot of work. So did I. I was in Trenton frequently, and I did everything it was humanly possible to do, and I consider that as part of my duty as a citizen and doctor. My only thought is, don't drag down the profession by professional lobbying. I'd rather have all the bad legislation pass than to forfeit my position as a respected physician.

*Dr. Lancelot Ely:* One of the greatest problems, when it is referred to the men at home to see their legislators, is that they fail to see the legislators.

*Dr. McBride:* They should.

*Dr. Ely:* But they don't. We are sometimes asked 2 or 3 days before the bill comes up, and it is impossible even to get a letter to them, and sometimes we cannot do it individually, and I think that is the problem we have to deal with. They go to Trenton without being seen by us.

*Dr. F. G. Scammell:* It sounds very much to me like a controversy in the political world in which they call a man a boss if he has something to do with an organization, or with the other type of man they call him a leader if he has something to do with an organization and he gets things through. I think Dr. Newcomb's attitude could easily be remedied by a general manager who could get the interest of the members of the society and take it

away from the lobbyists. I feel, as Dr. Newcomb has said, that everybody's business is no one's business. From the fact that he has a certain amount of pride as a physician, and knowing that he wants public health conserved, so far as his condition is concerned, being a physician and being a member of that honorable body, he just doesn't like the attitude of its being necessary for him to interview them all. While he feels his position is such that he has a prerogative, perhaps, to ask different ones, yet he doesn't want it to devolve on him that he is designated to button-hole, as has been said, every member to see what he is going to do. I think the in-between way is that a general manager, or leader, would help Dr. Newcomb out instead of having a boss or lobbyist as Dr. McBride has said.

*Dr. A. E. Jaffin:* What provision is there now for notifying the members as to what inimical legislation is coming up, so that each individual physician may see his State Senator and results may be accomplished without resorting to lobbying?

*Dr. D. L. Haggerty:* I would like to make a motion.

*President Sommer:* There is a motion before the house now.

*Dr. Haggerty:* I would like to amend that to include Dr. Hargrave and Dr. Cole.

This amendment was accepted by the maker and the seconder of the motion.

*President Sommer:* Before I put this motion, I'd like to have someone answer Dr. Jaffin's question. Dr. McBride, you know something about that.

*Dr. McBride:* Why, yes. Through the Chairman of our Welfare Committee, and through our Executive Secretary, every society is notified concerning all legislation in the interest of public health or inimical to the interest of public health.

*President Sommer:* I shall put the motion that the State Society appreciates the noble efforts of Drs. Newcomb, Hargrave, and Cole in our interests.

The question was put and the motion carried by a standing vote.

*President Sommer:* Is there any further business?

*Dr. Eagleton:* I want to repeat what I said the last time I spoke on legislation. There are 2 schools in this society in regard to legislation. One believes that we should stay at home and when we receive a letter, if we pay any attention to it, all right; if we don't, all right; and let the government go its own way. The other believes it is our duty as citizens to take an active part in the representation of

the medical profession. I think I am the man that Dr. Morrison spoke of.

*Secretary Morrison:* No, you are not.

*Dr. Eagleton:* If I am not, I am responsible for it. I want you to look back for a few minutes to see the difference between what has been accomplished and what we have to look forward to in the future. We had no representation at Trenton. If a bill was introduced that was inimical to our interests, we asked the assembly to have a hearing on the bill and they laughed at us, and the bill was passed and became a law without a hearing; and 475 chiropractors are licensed by the state of New Jersey because of the inaction of the medical profession of New Jersey. Against my will, because I felt strongly about it, I became active in the movement and we organized. We organized as any other body of American citizens should organize. We didn't organize by voluntary contributions; we didn't ask one man to do the job. In 3 years we passed 3 measures of advantage. We repealed the original chiropractic bill and in 3 successive years we passed bills to the advantage of the medical profession. Then, what Dr. Morrison speaks of, and what Dr. McBride speaks of, we were accused of being lobbyists.

As Dr. Newcomb has said, he has lost all of his dignity doing our work. Well, I don't think he is losing or has lost his dignity. I think he has done his duty as an American citizen. I think it is my job, because I am an American citizen, to go down to the government and tell them my views and do all I can to put it over. If I haven't enough power in me, it is just too bad. But if that principle is carried through, just to stay at home

and say it is not dignified, within the lifetime of somebody in this room, the United States will be ruled by a dictator. The whole trouble with this government, and it is the only trouble, is this attitude that politics are dirty. They are not dirty. They are our duty. It is our duty to play politics as they are played.

I have not been asked to go to Trenton. If I had been asked, I should have gone. It is not my job. Nobody asked me but if the medical profession is going to play a part, it must be heard in the Legislature. I have just come from the meeting in New York State. What do we hear—about gastric ulcers? No. About fractured skulls? No. In the meeting of the House of Delegates, it is the attitude of the profession as a whole that they must be heard in the Legislature. If we are to help solve the problems that are confronting the American people in regard to the medical profession, we must go the same way, give the government our help. Who kicks against the lobbyist? The fellow who doesn't want to vote in favor of what the lobbyist is doing.

As an American citizen, 1 year ago I spoke against dirty politics. Politics are dirty because we passed the buck. If we, the medical profession, will go into politics, we will do ourselves a great deal of good and, what is more, we will do for the public a job that we are expected to do.

*President Sommer:* Is there any further new business? If not, a motion to adjourn is in order.

*Member:* I so move.

The motion was seconded and carried.

The meeting adjourned at 5.45 p. m.

## GENERAL SCIENTIFIC SESSION

### *Thursday Morning Session*

June 4, 1931

The first general session of the Scientific Program of the One Hundred and Sixty-Fifth Annual Meeting of the Medical Society of New Jersey, held at the Hotel Berkeley-Carteret, Asbury Park, New Jersey, convened at 10.10 a. m., President Sommer in the chair.

*President Sommer:* It is with deep regret that I have to announce that Dr. Deaver is not, for reasons of health, able to be present in person this morning, but he has delegated his son, J. Montgomery Deaver, to act in his place. Deeply as we appreciate the talents of Dr. Deaver as a teacher, and personally I re-

gret his absence as a dear and honored friend and teacher, I know that his son will endeavor to replace him to the best of his ability.

Dr. J. M. Deaver presented the prepared paper of Dr. John B. Deaver, of Philadelphia, on "Surgical Aspects of Biliary Tract Disease".

*President Sommer:* I believe we shall all agree that the son of the gifted father has nobly filled the father's place this morning. This paper is now open for discussion and the discussion will be started by Dr. Max Danzis, of Newark.

Discussion followed by Drs. Danzis and Deaver.

*President Sommer:* The next paper is by Dr. B. B. Vincent Lyon, of Philadelphia, on



the "Value of Duodenal Tube Drainage of the Biliary System and Treatment of Various Diseases and Disorders of the Liver".

*Dr. B. B. Vincent Lyon* (Philadelphia): In the first place, I want to express my appreciation of the honor of being invited to speak here today. In the second place, I want to express my personal share in your regrets that Dr. John B. Deaver was not able to be here, and I say that advisedly because some of the views that I am about to express are not in accord with some of the accepted surgical teachings. In that respect, I would much prefer to have Dr. Deaver here in rebuttal than to have him absent.

Dr. Lyon presented his prepared paper, and discussion followed by Drs. George H. Lathrope, A. E. Jaffin, S. F. Wade, W. N. Barbarito, Maurice Asher, Max Danzis, J. Polevski and B. B. V. Lyon.

*President Sommer*: In closing this session I want to say that I feel the society owes a debt of gratitude to Dr. Deaver and Dr. Lyon for their very wonderful explanations of medical, or surgical and medical, conditions of the liver and bile passages, and I advocate giving them a rising vote of thanks.

The audience arose.

*President Sommer*: The next session will be held at 2.30 p. m.

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#### *Thursday Afternoon Session*

June 4, 1931

The Thursday afternoon session convened at 3 p. m., with Dr. Sommer presiding; this scientific session having been immediately preceded by a session of the House of Delegates.

*President Sommer*: The session of the House of Delegates now being ended, we shall start on the Scientific Program. Owing to some difficulty with the lantern, the first essayist has begged off until later in the afternoon, so we shall take up the second paper on the program—"Cardiac Irregularities, Their Clinical Recognition", by Philip Marvel, Jr., of Atlantic City. Immediately after Dr. Marvel is through, the next paper will be presented and these 2 papers will be discussed together.

Dr. Philip Marvel, Jr., of Atlantic City, presented his prepared paper and Dr. J. Polevski followed with a paper on "Silent Mitral Stenosis; Its Detection and Significance", and discussion having been opened by Drs. Harvey M. Ewing and A. E. Jaffin, was continued by Dr. Hyman I. Goldstein and closed by Drs. Marvel and Polevski.

*President Sommer*: We shall now listen to

the paper on "Fusospirochetal Diseases of the Lung", illustrated with lantern slides, by Drs. Altschul, Pons and Herrman.

Dr. Altschul read that paper and explained the pictures as the lantern slides were projected upon the screen, thus reporting an extremely interesting and important piece of scientific investigation.

*President Sommer*: This paper will be discussed by Dr. William P. Belk, of Philadelphia. At the end of Dr. Belk's discussion, the House of Delegates will meet to receive the report of the Business Committee and transact a little extra business. That will be followed by the last paper on today's program on "Epitheliomas of the Skin; Differential Diagnosis and Treatment".

Dr. Belk started the discussion, which was later participated in by Drs. W. G. Herrman and C. A. Pons.

A meeting of the House of Delegates followed at this point, and at the end of that meeting, due to the small audience present, it was voted to have the presentation of Dr. James' paper at the next morning session.

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#### *Friday Morning Session*

June 5, 1931

The Friday morning session convened at 10.10 a. m.

*President Sommer*: I shall ask this house to come to order, and we shall start with Dr. James' paper on "Epitheliomas of the Skin; Differential Diagnosis and Treatment".

Dr. James read his paper and exhibited a series of lantern slides to illustrate the subject, after which discussion was opened by Dr. H. J. F. Wallhauser and further pursued by Dr. N. B. Heller.

*President Sommer*: There will be no further discussion of this subject, I am sorry to say. Dr. James, because we are now an hour behind in our program.

We shall now listen to Dr. Benjamin S. Barringer, who will present his paper on "Radiation of Bladder and Prostatic Carcinomas".

Dr. Barringer read his paper, which also was accompanied by a lantern slide demonstration, and was discussed by Dr. Stanley R. Woodruff.

*President Sommer*: Dr. Sherman's paper is on the "Rôle of the General Practitioner in Conservation of Vision".

Dr. Elbert S. Sherman, of Newark, presented a brief synopsis of his paper. However, his report will be presented for publication in full. Discussion was opened by Dr. Elias J. Marsh, of Paterson.

Mr. Lewis H. Carris, Managing Director of the National Society for Prevention of Blindness, was present by invitation to continue the discussion, and later, upon motion of Dr. Sherman, he was tendered a vote of thanks for attending and taking part in the proceedings.

*President Sommer:* Dr. Soreci's paper will be delivered at the opening of this afternoon's session and your President will now deliver his address. That is to be followed by a short paper by Dr. Frank C. Johnson, of New Brunswick, on "Findings of the Governor's Conference on Child Welfare and Protection".

Dr. John F. Hagerty, First Vice-President, took the Chair.

President Sommer then delivered the Annual Presidential Address. (See Journal of July.)

*Chairman Hagerty:* I am sure you have all enjoyed this very comprehensive review of subjects concerning us all so vitally. The paper will be published in full in the Journal, where its reading will permit of further and more mature consideration, and the suggestions contained therein will be later acted upon by the various committees of the society.

*Dr. Eagleton:* Don't you think the paper as a whole with the recommendations should at this time be referred to the Board of Trustees to see that something concrete is done?

*President Sommer:* I prepared an abstract, which I read at the opening session of the House of Delegates on Wednesday, and those recommendations were acted upon during that session.

President Sommer resumed the Chair.

*President Sommer:* We shall finish this morning's program by listening to a short paper on "Findings of the Governor's Conference on Child Welfare and Protection", by Dr. F. C. Johnson, of New Brunswick.

Dr. F. C. Johnson presented his prepared paper.

*President Sommer:* This paper will be discussed briefly by Dr. Stanley H. Nichols, of Monmouth, a member of the Continuation Committee of the New Jersey State Conference on Child Health and Protection.

*President Sommer:* I shall declare this session closed, and we shall start again at 2 p. m.

#### *Friday Afternoon Session*

June 5, 1931

The Friday afternoon session convened at 2.45 p. m., with Dr. John F. Hagerty presiding.

*Chairman Hagerty:* The meeting will

please come to order. We shall now have the pleasure of hearing Dr. A. L. Soreci, of New York City, speak on "New Views on Pathogenesis, Diagnosis and Treatment of Ulcer and Cancer of the Stomach, Cholelithiasis, and Diseases of the Digestive Organs in General". Brief discussion, by Dr. Joseph Samenfeld, of Brooklyn.

*President Sommer:* Dr. Soreci having taken up all of the time that might be used for discussion, we shall now go on to Dr. Marsh's paper on "Fees, Specialists, and Kindred Annoyances".

Dr. Elias J. Marsh presented an abstract of his prepared paper, and a discussion prepared by Dr. George H. Lathrope, which was not read because of lack of time, but was submitted for publication.

*President Sommer:* We shall go on with the next topic which is, "An Etiologic Conception of the Disease Entity", by Dr. H. B. Logie, of New York City.

Dr. H. B. Logie presented his prepared paper.

*President Sommer:* Is Dr. Hicks here?

As Dr. Hicks was not present, his paper was passed over. (It should be explained that Dr. Hicks was in attendance, and had left the room for a few minutes only, but his paper was, unfortunately, called for during that brief absence. Ed.)

*President Sommer:* Dr. Wilbur, do you wish to present your paper on "Manganese Poisoning"?

Dr. F. P. Wilbur, of Franklin, presented his prepared paper.

*President Sommer:* Dr. Beling not being here to discuss this paper, we shall permit Miss Warfield to read her paper on "The State's Provision for 3 Types of Deaf Children".

*Miss Ethel Warfield:* I haven't any paper and I shall take just about 2 minutes of your time.

I want to tell you about 3 types of deaf children who need special education which the state provides. First, is the congenitally deaf child that you commonly think of as the deaf-mute. We find that most people think that our State School for the Deaf in New Jersey, and the special classes, provide only for that type of child. I shall not take the time to talk about that type because you know about it, but there is the partially deaf child and the child who is made deaf by meningitis, and we are getting an increasing number of those children. They need special education. The child who has meningitis before the age of 6 loses his speech unless he is brought under such care as we are able to provide.

We urge the coöperation of the medical



profession in having parents realize that they must send their children to a school where they can get special training to keep the speech they once had.

And then, there is the partially deaf child who needs special education. It does not depend on the amount of the hearing. There are many other factors. There is a school in Trenton, under the State Board of Education; there are special classes for the deaf in Newark, Jersey City, Bayonne and Paterson; and we need the coöperation of everybody to get such children into special classes at the proper time.

*President Sommer:* Thank you very much. Your remarks will be printed in the transactions of this meeting.

*Miss Warfield:* I appreciate this opportunity very much, and I know how time goes and how you are pressed for more of it at this convention.

*President Sommer:* It now becomes my great pleasure to hand over to you (addressing Dr. Hagerty), my tried and trusted friend, the gavel of the Medical Society of the State of New Jersey. I hope that the end of your administration will find you in the same position I am, fairly well satisfied, but contented to return to private life. Thank you! (Applause)

*President-Elect Hagerty:* I am sorry there are not more around here to hear me say what I am about to say. It is an especially happy privilege to succeed Dr. Sommer, who has been a valued and tried friend for many years and who is a man whose capabilities are well known to all. It really adds to the joy with which I assume the office of President, to know I succeed a friend of so many years.

There was some misunderstanding on the part of the Program Committee. I was informed some 2 months ago that I was to prepare an address. It was to be an innovation for the President-Elect to deliver an address. I thought it a bit of a hardship but I prepared an address and then, apparently, they didn't find an opportune time for its delivery. I think you will agree with me that it would be unfair to deliver it now. I am sorry, because I had a few things I wanted to say.

The only thing I can say to you now is that I appreciate very highly the honor of having been made president of this venerable society, and I shall do my very best to sustain the proud record it has held these many years.

There being no further business, I shall declare the session adjourned.

The meeting adjourned at 3.50 p. m.

## SECTION ON OPHTHALMOLOGY, OTOTOLOGY AND RHINOLARYNGOLOGY

### Thursday Morning Session

June 4, 1931

The Section on Ophthalmology, Otology and Rhinolaryngology of the Medical Society of New Jersey, held at the Berkeley-Carteret Hotel, Asbury Park, June 4 and 5, 1931, convened at 10 a. m., with Dr. Elbert S. Sherman, of Newark, presiding.

*Chairman Sherman:* In opening the fourth eye, ear, nose and throat section meeting of this society, I want to thank you for the compliment of electing me Chairman. It came as somewhat of a surprise. I was not here on the last day of the last meeting, and I knew nothing about what you did in regard to a chairman until I read it 3 or 4 months later in the Journal. However, I have tried to get up a program which I hope you will like. I think there are several papers listed that are well worth while coming to hear.

The first paper is a description of a muscle shortening operation, by Dr. Hubbard, of Plainfield.

*Dr. Harry V. Hubbard:* I would prefer to

have the title of this paper a little different from that assigned me. I like to call it "Overlapping the Rectus Muscles for the Correction of Strabismus", and will describe it and report 2 illustrative cases.

Dr. Hubbard read his prepared paper.

*Chairman Sherman:* As the 3 papers this morning are all related to the external ocular muscles, I think it might be well to postpone discussion until they have all been read. If that is agreeable, we will do so.

We are very fortunate this morning in having Dr. John H. Dunnington, of New York, with us, and he is going to give a talk on "Clinical Management of Heterophoria". His ideas are sound and conservative and I am sure we are fortunate in having him come here this morning.

Dr. John H. Dunnington read his prepared paper.

*Chairman Sherman:* We will continue the program with a paper concerning the "Combined Orthoptic and Operative Treatment of Convergent Squint", by Dr. Linn Emerson, of Orange.

Dr. Linn Emerson read his prepared paper.

*Chairman Sherman:* These very instructive papers are now open for discussion. I want to say that Dr. Johnson and Dr. Dunnington, and any other guest who may be here, are invited to take part in the discussion this morning and at other sessions also. The discussion on these 3 papers will be opened by Dr. George F. Sullivan, of Hoboken.

Further discussion followed by Drs. Zehnder, Marsh, Littwin, Sherman, Emerson, Hubbard and Dunnington.

*Chairman Sherman:* Is Dr. Mendell, of Camden, here? I learned that Dr. Mendell had an interesting paper which was available. I told him that we would put it on if we had time. It wasn't offered until after the program had been sent to the printer. As he is not here, this will conclude the morning program.

The meeting adjourned at 11.45 o'clock.

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#### *Thursday Afternoon Session*

June 4, 1931

The meeting convened at 2.25 p. m., Dr. Sherman presiding.

*Chairman Sherman:* The first paper on the program this afternoon is by Dr. Thomas H. Johnson, of New York, on "Tumors in the Neighborhood of the Optic Chiasm, with Special Reference to Eye Symptoms".

Dr. Thomas H. Johnson read his prepared paper.

*Chairman Sherman:* Discussion on Dr. Johnson's paper will be opened by Dr. Wells P. Eagleton, of Newark.

Dr. Eagleton opened the discussion and Dr. Johnson responded in a few closing remarks.

*Chairman Sherman:* Thank you, Dr. Johnson, and you, also, Dr. Dunnington, for coming over here from the "Medical Center" today and giving us these splendid, instructive papers. They have made the session well worth while. Personally, I feel very much gratified to find the attendance so large at this session today. It is to me an indication that we have gotten up an interesting program for you.

We have another paper on a subject which is of great practical importance and one which we all know at least something about and are interested in every day. The title is "Ocular Manifestations of Focal Infection", by Dr. Samuel T. Hubbard, of Hackensack.

Dr. Samuel T. Hubbard read his prepared paper.

*Chairman Sherman:* Discussion on this paper will be opened by Dr. Charles Zehnder, of Newark.

Dr. Zehnder started a discussion that was participated in by Drs. Weiss, Littwin, Johnson, Griessmier, Liva, Sherman and Hubbard.

*Chairman Sherman:* We will continue the program, and this is the last paper, by one on "Nontraumatic Hemorrhage in the Vitreous of Young People", by Dr. Charles F. Adams, of Trenton.

Dr. Charles F. Adams read his prepared paper.

Dr. Burritt took the chair.

*Chairman Burritt:* The discussion of this paper is to be opened by Dr. Wallace Pyle, of Jersey City.

Dr. Wallace Pyle read his discussion.

Dr. Sherman resumed the chair.

*Chairman Sherman:* This paper is now open for general discussion.

In response to this invitation, Drs. Goldstein, Johnson and Adams spoke.

*Chairman Sherman:* The meeting is now adjourned until tomorrow morning at 10 o'clock.

The meeting adjourned at 4.50 p. m.

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#### *Friday Morning Session*

June 5, 1931

The meeting convened at 10.30 o'clock, with Dr. Sherman presiding.

*Chairman Sherman:* There is not as much interest, apparently, in otolaryngology today as there was in ophthalmology yesterday.

The first paper this morning is on "Some Cases of Facial Paralysis", by Dr. E. P. Cardwell, of Newark.

Dr. E. P. Cardwell read his prepared paper.

*Chairman Sherman:* The discussion on this paper was to have been opened by Dr. Fisher. I don't see him here. The paper is open for general discussion.

Drs. Barkhorn and Donohue discussed this paper.

*Chairman Sherman:* Anybody else? If not, I will ask Dr. Cardwell if he has anything to say in closing.

*Dr. Cardwell:* I want to thank these gentlemen for their kind remarks, and thank you all for your very interested attention to my efforts.

*Chairman Sherman:* We now have a paper on "Important Factors in Surgery of Congenital and Acquired Facial Deformities", by Dr. Jacques W. Maliniak, of Newark.

Dr. Jacques W. Maliniak read his prepared paper.

Dr. Hubbard took the chair.

*Chairman Hubbard:* The discussion on this interesting paper will be opened by Dr. Barkhorn, of Newark.



In the discussion, Dr. Barkhorn was followed by Drs. Hubbard and Fitch.

*Chairman Hubbard:* Any other discussion? I see no other papers on the program. In the absence of the Chairman of the section, I dislike to bring the session to a close, although I see on the program that there is a general session called for 12 o'clock. I suppose that we should go there; so, unless there is something else to be brought up, we will consider the session closed for the morning.

The meeting adjourned at 11.50 a. m.

### *Friday Afternoon Session*

June 5, 1931

The meeting convened at 2.50 p. m., with Dr. Sherman presiding.

*Chairman Sherman:* The first paper this afternoon is on "Allergy as a Factor in the Etiology of Diseases of the Nose and Paranasal Sinuses", by Dr. Royce Paddock, of Newark.

Dr. Royce Paddock read his prepared paper.

*Chairman Sherman:* If there is no objection, the discussion on this paper will be postponed until after the reading of the next 2 papers, when they may all be discussed at the same time.

The program will be continued with a paper on "Accessory Nasal Sinus Infection in Children", by Dr. G. W. Strickland, of Roselle.

Dr. G. W. Strickland read his prepared paper.

*Chairman Sherman:* Here is one for you nose specialists: "The Credulity of Rhinologists Anent the Sinuses", by Dr. Charles S. McGivern, of Atlantic City.

Dr. Charles S. McGivern read his prepared paper.

*Chairman Sherman:* The discussion on these papers will be opened by Dr. Charles H. Schlichter, of Elizabeth.

Dr. Schlichter was followed in the discussion by Drs. Barkhorn, Weiss, Wood, Hubbard, McGivern, Bovinger, Burritt and Strickland.

*Chairman Sherman:* If there is no further business—

*Dr. Barkhorn:* I move a rising vote of thanks to our genial Chairman for his program, excellent as it was, and for his kindly efforts in presiding.

The motion was seconded and a rising vote of thanks given.

*Chairman Sherman:* Thank you. I might say in this connection that this afternoon's program is largely the work of Dr. Barkhorn. I asked him to make suggestions for the ear, nose, and throat program, and this is largely his work. It has been a pleasure to serve as Chairman of this section and I am glad that we have had such a good attendance. It has been very gratifying.

The meeting adjourned at 4.25 p. m.

## SECTION ON PEDIATRICS

*Thursday Morning, June 4, 1931*

The section was called to order at 10 a. m. in the South Solarium of the Berkeley-Carteret Hotel, Asbury Park, by the Chairman, Dr. Elmer G. Wherry, of Newark.

A paper entitled "Tonsil Problem" was read by Dr. Chester R. Brown, of Kearny, and was discussed by Drs. Henry C. Barkhorn, William F. Kein, Louis Weiss, and F. C. Johnson.

A paper entitled "Sinus Diseases in Children" was read by Dr. E. Le Roy Wood, of Newark. This was discussed by Drs. Henry C. Barkhorn, Chester R. Brown, Louis Weiss and Joseph A. Clarken.

A paper was read by Dr. Stanley Nichols, Long Branch, entitled "Presentation of 2 Cases of Xerodermia Pigmentosum".

The next paper was read by Dr. Paul Hosp,

of Newark, entitled "Symptomatology and Treatment of Thymus Gland Conditions in Children", and discussed by Drs. Charles F. Baker, N. A. Antonius, E. Reissman and Frank W. Pinneo.

A paper entitled "A Case of Fatal Poisoning by Oil of Wintergreen" was read by Dr. F. W. Lathrop, of Plainfield; discussed by Drs. Kenneth Blanchard and F. C. Johnson.

Motion was made by Dr. F. C. Johnson that this case report of Dr. Lathrop's be sent to the State Department of Pharmacology, explaining that we feel a great many people have over-looked the dangers of oil of wintergreen, and urging them to require that oil of wintergreen be sold only under a poison label.

This motion was seconded and unanimously carried.

Adjournment at 1.30 p. m.

*Thursday Afternoon, June 4, 1931*

The section reconvened at 2.30 p. m., with Dr. Wherry presiding.

The first paper was read by Dr. F. J. McCauley, of Newark, entitled "Treatment of Heredodysphilia". This was discussed by Drs. Robert R. Sellers, Henry J. F. Wallhauser, Louis J. B. LeBel, N. B. Heller, J. E. Kiley, and, in closing, by the essayist.

A paper was read by Dr. Lewis W. Brown, of Newark, entitled "Blood Transfusion as a Therapeutic Agent in Pediatrics". This was discussed by Drs. F. W. Lathrop, F. J. McCauley and Isidore Zweigel.

Dr. Joseph H. Marcus, of Atlantic City, read a paper entitled "Clinical Evaluation of a Palatable Concentrate of Vitamins A and D"; discussed by Drs. Kenneth Blanchard, H. B. Silver and Stanley Nichols.

Adjournment of the session at 4.30 p. m.

*Friday Morning, June 5, 1931*

The section reconvened at 10.15 a. m., at the call of Dr. Wherry.

A paper was read by Dr. F. C. Johnson, of New Brunswick, entitled "Influenzal Meningitis; Report of a Recovered Case". This was discussed by Drs. F. W. Lathrop, Maurice L. Ripps, Julius Levy, George H. Lathrop, Finkelstein and Royce Paddock.

The next paper was read by Dr. Royce Paddock, of Newark, on the "Importance of Differential Study of the White Blood Cells, as Illustrated by Certain Cases".

The last paper was read by Dr. Julius Levy, of Newark, on the "Results Obtained in 40 Cases of Eczema on a Milk-Free Diet". Discussed by Drs. F. W. Lathrop, Maurice L. Ripps, Ernest G. Hummel, Finkelstein, Royce Paddock, and, in closing, Dr. Levy.

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## SECTION OF SCHOOL PHYSICIANS

*Wednesday Afternoon, June 3, 1931*

The section was called to order in the Lion's Room of the Berkeley-Carteret Hotel, Asbury Park, at 2.30 p. m. by its Chairman, Dr. Allen G. Ireland.

The first paper read was entitled "Foot Examinations in Public Schools" and was presented by Dr. Donald B. Hull, of Ridgewood. This was discussed by Drs. S. T. Snedecor, Ella Coughlan, C. B. Warren, Harvey Brown, Allen G. Ireland, Marcus W. Newcomb, Joseph Schapiro, William J. Lamson and Fred A. Kinch.

Dr. Grace M. Kahrs, of Jersey City, was introduced by the Chairman and read a paper entitled "Physician's Part in Training Teachers". This was discussed by Drs. S. T. Snedecor, Fred A. Kinch and Allen G. Ireland.

A paper was read by Dr. I. W. Knight, District Health Officer, entitled "Facts in a Child Health Program of Common Interest to School and Community Health Officials".

The next paper was read by Winton J. White, Superintendent of Schools of Englewood, entitled "Health in Education from the Point of View of a School Administrator".

A resolution was offered by Dr. Knight that, as the removal of clothing is essential to a thorough physical examination, physicians shall be authorized to remove from school children so much clothing as may be necessary to permit the detection of physical defects.

Motion was made by Dr. Kinch that this resolution be adopted, and it was seconded and carried.

Motion was made by Dr. Snedecor, seconded by Dr. Schapiro, that this section request the House of Delegates to provide for the appointment of a committee of 5 members, possibly as a subcommittee from the Welfare Committee of the State Medical Society, to act as an Advisory Committee to the State Department of Public Instruction, for consideration of the medical program in the schools, the question of proper salaries for school physicians, proper standards for school medical work, and any other data that might properly come before such a committee.

This motion was voted upon and duly adopted.

Adjournment at 5.10 p. m.



# WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF NEW JERSEY

## Thursday Morning Session

June 4, 1931

The annual meeting of the Woman's Auxiliary to the Medical Society of New Jersey convened at the Hotel Berkeley-Carteret, Asbury Park, New Jersey, at 10.10 a. m., with Mrs. John Nevin, of Jersey City, President of the Auxiliary, presiding.

*President Nevin:* The meeting will please come to order. We will open with prayer: "Honor the physician for the need thou hast of him: for the most High hath created him. For all healing is from God, and he shall receive gifts of the king. The skill of the physician shall lift up his head, and in the sight of great men he shall be praised."

The Secretary will read the minutes of the last meeting. May I say that in the absence of our Secretary, Mrs. John F. Hagerty will act as Secretary pro-tem, and that at a meeting of the Executive Board, held yesterday, a professional secretary was appointed by the Board.

Mrs. John F. Hagerty read the minutes of the last annual meeting.

*President Nevin:* May I say at this time that, due to a regrettable error in the minutes not having reached me until the autumn, there were 3 names misplaced on our official stationery. As soon as this error was discovered, I brought it to the attention of the Board, as well as to the attention of those concerned, and the Board advised that as the stationery had already been distributed it should stand.

What is your pleasure concerning those minutes?

*Mrs. Edward Clarke:* I move that the minutes be corrected so that they will correspond with the heading of the stationery.

*Mrs. R. B. Rogers:* I second that motion.

The motion was unanimously carried.

*President Nevin:* We will now hear the financial statement of the Treasurer.

Mrs. Edward Clarke read her prepared statement, as follows:

### Annual Report of the Treasurer

Membership—June 1930	651
Membership—June 1931	727

Balance—June 12, 1930 \$263.39

Receipts for year:

Dues (1930 arrears only)	
March 24, 1931	\$ 19.50
June 4, 1931	51.25

Total dues collected \$ 70.75

### Contributions:

Annual Meeting Fund (state)	241.75
Fund for A. M. A. tea at Stenton	175.00

Total contributions	416.75	
Total Receipts	\$487.50	487.50
		\$750.89

### Disbursements for year:

Expenditures	\$ 68.42
Dues refunded	26.50
Total Disbursements	94.92

Balance June 4, 1931	\$655.97
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Respectfully submitted,  
Mrs. Edward Clarke,  
Treasurer.

*President Nevin:* Unless there is objection, the Treasurer's report will be accepted and filed as read. Hearing none, it is so ordered.

In the absence of our Corresponding Secretary, Mrs. Charles B. Kelley, our Secretary pro-tem will read her report.

Mrs. John F. Hagerty read the prepared report of Secretary Kelley, which was as follows:

### Report of Corresponding Secretary

The work of the Corresponding Secretary for the past year has been largely that of coöperating with the President of the State Auxiliary. There has been a fair amount of correspondence in correlating the activities of the various County Auxiliaries; this correlation has been taken care of by questionnaires sent to the county officers. An important part of the work of the Corresponding Secretary was the issuance and mailing of cards for the Delegates and Alternates of the Auxiliary to the American Medical Association.

All bills incurred have been paid promptly by Mrs. Clarke, the Treasurer. I would at this time express my appreciation to Mrs. Clarke for her coöperation in carrying out of the work of this office.

The general response on the part of the membership has been gratifying, and the duties of the Corresponding Secretary have brought her in contact with a number of interesting and charming people, for which she is grateful.

Respectfully submitted,  
Anna H. Kelley,  
Corresponding Secretary.

*President Nevin:* At this time I will entertain a motion that the report of the Corresponding Secretary be received.

*Mrs. R. B. Rogers:* I will make such a motion.

*Mrs. Emanuel Newman:* I will second it. The motion was carried.

*President Nevin:* We will now have the reports of the standing committees, and it would be appropriate at this time to ask if

you would like to accept them separately or as a whole. If you will, accept them as a whole, because our time is somewhat limited, and because of their number, it would facilitate matters.

*Mrs. George Culver:* I move that the reports of the standing committees be accepted as a whole.

*Mrs. Emanuel Newman:* I second that motion.

The motion was carried.

*President Nevin:* May we have the report of the Publicity Chairman, Mrs. W. Blair Stewart, Chairman? I believe Mrs. Stewart went abroad yesterday, or today, so in her absence Mrs. Maurice Chesler will read her report.

Mrs. Maurice Chesler read the prepared report of Mrs. Stewart, which follows:

#### Annual Report of Publicity Chairman

Whether we know it or not, there is a fraternity of the wives of physicians. Although the members of the Medical Auxiliary endeavor to be of assistance to their own doctors, and to the medical profession generally, yet the real reason for the existence of the Auxiliary is to learn to know each other and to enjoy that sociability which makes for greater efficiency in their togetherness.

New Jersey is not 100% organized, but should be. The Auxiliaries are not scoring 100% in sending in reports to the Publicity Chairman, as they should be. Some of our counties only have quarterly meetings. A few have a record of sending in their reports every month. This has been greatly appreciated. Every Auxiliary should have a reporter. Strive to reach that goal next year.

The Auxiliaries meet mostly at the time of the meetings of the County Medical Societies—and after their separate meetings, they often come together for a social hour. A few auxiliaries meet only quarterly. This is not to be advised, however, as it is not frequent enough to keep up a desired interest.

Some Auxiliaries prefer the social side of life, but, generally speaking, much has been accomplished. New friendships have been made, which would otherwise never have been, and there has been coöperation; and reciprocity meetings have been enjoyed. These help to make a better understanding among the societies.

Assistance has been given to the Society for the Relief of the Widows and Orphans of the Medical Men of New Jersey, also to the Red Cross appeal. Hygeia subscriptions, scholarship funds, the education of children in the hospitals, have been stressed.

Christmas charities and gifts have brought joy to the hearts of the children and the sick and the crippled. "Inasmuch as ye have done it unto one of the least of these, my children, ye have done it unto me."

Your Publicity Chairman has attempted to send news from our State Auxiliary through Mrs. Jackson Freeman, to the A. M. A. Bulletin.

The Publicity Chairman has attended the Executive meetings of the State Board in Trenton, and deems it a privilege to know and to work with the splendid women of the Medical Auxiliary. It has been a special pleasure to serve our beloved President, Mrs. John Nevin.

A "history" of one of the County Auxiliaries is being written. Many lecturers and splendid speakers have been heard in the various county auxiliaries, among which have been: Mrs. Nevin and Mrs. Hunter; Mrs. E. C. Taneyhill, Field Secretary of the State Medical Society. Lectures on Social Hygiene and Child Psychology by Dr. Ernest Groves. Dr. F. H. Richardson, Dr. Bruce Robinson and Dr. Fleck, of Columbia University; by Dr. H. O. Reik, Editor of the State Medical Journal; Dr. Ellen Potter, Dr. Francis Harvey Green, Mrs. A. Haines Lippincott, Dr. Coleman, of Jersey City, and others.

We regret to announce that some valued members have been claimed by death this year.

The Auxiliaries are looking forward to the A. M. A. Auxiliary meeting in Philadelphia, June 8-12, at the Bellevue-Stratford, and also to the meeting of our New Jersey State Medical Society and Auxiliary, June 3-5 in Asbury Park. There are many social, scientific and historic advantages to be enjoyed by attending these conventions.

It is a personal obligation for every Auxiliary member to play her part as a hostess to our national guests.

As this Publicity Chairman's term of office expires, she expresses deep appreciation to those who have been faithful in sending reports, while to those who have not she appeals to do better next year, and so help the new chairman.

Respectfully submitted,

Mrs. W. Blair Stewart.

*President Nevin:* We will now have the report of the Committee on Public Health and Hygeia, Mrs. Theodore Teimer, Chairman.

Mrs. Teimer read her prepared report:

#### Report of Public Welfare Committee

I had hoped that a more detailed report of the public welfare work could be given, one which would have shown a response to a short program which was sent out several months ago to every county chairman. Perhaps the work has been carried on and will show itself in the various reports of the county presidents.

The program which I suggested was the following:

*Hygeia.* I would suggest that either the chairman of welfare work of your county or the secretary of the county medical society mail a blank to all members of the county society in order to obtain subscriptions for Hygeia.

The price of 1 year's subscription is \$3 with a discount of \$1.25 given you by the American Medical Association. This might be added to a fund to be used for some project in which your organization may be interested. In Essex County it is added to the Scholarship Fund.

*Membership Drive for the Society for the Relief of Widows and Orphans.* We have been asked to make a membership drive for this organization. Application blanks will be sent to every member of your Auxiliary. If you know of any physicians who are not members of the society, urge them to join.

Dr. Edward J. Ill, the president of this organization, has communicated with me on several occasions and also invited me to attend the annual meeting, when I promised that our auxiliary would make a great effort to increase its membership list.



Since sending application blanks to all of the members throughout the state they have added 25 new members to their organization. However, this is only a beginning.

I earnestly suggest that a special committee be appointed in every county to personally interview the wives of physicians who are not members of the Society for the Relief of Widows and Orphans.

*Educate Ourselves on Health Matters.* Read the Medical Journal. Communicate with presidents of county Parent-Teachers' Associations and Women's Clubs in order to obtain appointments for Mrs. Taneyhill, who will lecture on Mental Hygiene and other medical topics of public importance.

As Chairman of the Public Health Committee, I have attempted to familiarize myself with the scope of the work which the Auxiliary is expected to perform. Most attention has been paid to educational work by means of increasing the circulation of Hygeia and calling the attention of various organizations to the availability of Mrs. Taneyhill as speaker on public health problems. The most feasible program to follow seems to be to aid the various activities of the county medical societies along the lines of public health work.

Respectfully submitted,

Miriam S. Teimer.

*President Nevin:* The next committee to report is the Entertainment Committee, Mrs. William Freile, Chairman.

*Mrs. William Freile:* We have just a short report for the Entertainment Committee. The arrangements for the Thursday evening dinner-dance have been completed. The dinner-dance of tonight will be at 8 o'clock in the Crystal Room. It is urged that if any have not made reservations, they do so before noon today at the office.

Tomorrow we will have our Complimentary Luncheon to the incoming and outgoing Presidents of both the State Society and the Auxiliary, and to Mrs. McReynolds, of Texas. We should like to have a very good representation present, and to those who have not already secured tickets for this luncheon, let us say it is urged that you do so today.

Would those who have not registered for the "boat ride" please raise their hands? This is an invitation affair. Everything, including buses, boat ride, luncheon and card party, will be free.

About 45 raised their hands.

*Mrs. George N. J. Sommer:* I would like to ask a question of Mrs. Freile. Are husbands permitted to attend the subscription luncheon tomorrow?

*Mrs. William Freile:* Yes, they may come as guests if each one purchases a ticket at \$1.50.

*Mrs. George N. J. Sommer:* Are the men permitted on the boat ride this afternoon?

*Mrs. William Freile:* The Asbury Park group will have to answer that question.

*Mrs. William K. Campbell:* I understand there is a little confusion in regard to the trip this afternoon. There is to be no card party; the scenery is so lovely, we thought it better that you be not distracted by cards. I understand that the plan is to leave the hotel in buses to the boat. The trip on the boat is not very long, and there will be a grill luncheon in the Officers' Quarters at Fort Hancock, and I believe that Colonel Johnson will be a very delightful host.

*Mrs. Herrman:* The men are invited also, I believe.

*Mrs. William K. Campbell:* Yes. We leave here at 1 o'clock. There will be buses here at 1 p. m. to take us to the boat. It is a delightful sail, to Fort Hancock on Sandy Hook. There, we will be received by Colonel Johnson, and a luncheon will be served at 2 o'clock.

*President Nevin:* We will now hear the report of the Chairman of the Program Committee, Mrs. John F. Hagerty.

*Mrs. John F. Hagerty:* I have attended meetings relative to the work of the Program Committee, and have answered many letters relative thereto. I believe the program was handed in to Dr. Reik in time and was printed in the May issue of the State Society Journal; so everyone has had the opportunity to read it.

*President Nevin:* In the absence of Mrs. Samuel L. Salasin, who is Chairman of the Committee on Credentials and Registration, Mrs. William K. Campbell will act as Chairman pro-tem of that committee. May we now hear from Mrs. Campbell?

*Mrs. William K. Campbell:* I have heard from 15 counties; 45 delegates and 38 alternates have sent in their credentials. Of course, I have not yet checked up on this, and there may be more now.

*President Nevin:* Will someone move that the reports be accepted as a whole?

*Mrs. William C. Raughley:* I move that the reports of the Standing Committees, as given, be accepted as a whole.

*Mrs. H. H. V. Hubbard:* I second the motion.

The motion was unanimously carried.

*President Nevin:* We have some very important reports now, the reports of our County Auxiliary Presidents. These will really tell the tale as to what concrete work has been done throughout the year. What is your pleasure about accepting those? Do you wish to act on each one separately, or do you wish to accept them *en bloc*, as a whole?

*Mrs. H. H. V. Hubbard:* I move you, Madam President, that we accept the reports

of the County Auxiliary Presidents as a whole.

*Mrs. James F. Morton:* I second that motion.

The motion was carried.

*President Nevin:* In the absence of Mrs. J. T. Beckwith, President of the Atlantic County Auxiliary, Mrs. David W. Scanlan will give her report.

*Mrs. David W. Scanlan:* Mrs. Beckwith did not have any prepared report. Madam President. She thought the general report of Mrs. Stewart would cover the activities of Atlantic County, as well.

*President Nevin:* May I say, in reference to the first county report, which is Atlantic, that Mrs. Beckwith, the President, did not send in a report as she felt that her report and the activities of Atlantic County were entirely covered in the report given by Mrs. Chesler for Mrs. Stewart, the Chairman of our Publicity Committee.

May we hear from Bergen County next?

Mrs. W. S. Kilts read her prepared report.

#### **Annual Report of Woman's Auxiliary to the Bergen County Medical Society October 1930-1931**

Our Auxiliary comprises a membership of 50 in good standing with an average meeting attendance of 20.

We initiated the discovery and established the use of a two-year-old state law providing tutoring to children confined in hospitals for a long period. One case, at this time, has been provided for.

An interest in individuals has been an important direction of our energies, namely: holiday cheer to some deserving patient, in the way of a sweater given; handiwork and the commercial appreciation of it; a chess board for a group. We have donated \$140 for such patients in hospitals.

Readings and travel slides have been provided by our own active group.

Our large card party netted more than \$100.

A trip to Morris Plains, institution for the insane, was the feature of one afternoon.

The Medical Society informs us that we have increased its attendance, and the President of this Auxiliary is confident of willing support and continued interest, as was particularly evidenced by the ready response accorded the nominating committee at the recent meeting held by Mrs. George Finke, Chairman, of Hackensack.

Respectfully submitted,

Genevieve M. L. Kilts,  
President.

*President Nevin:* Burlington County.

Mrs. Luther Hartman read her prepared report:

#### **Burlington County**

The Burlington County Medical Society Auxiliary held its first meeting of the year at Burlington County Hospital in Mt. Holly, on November 6, 1930. Arrangement for Christmas at the hospital was our most important topic. We gave gifts

to 55 patients in the men's and women's wards. Auxiliary members assisted in trimming the hospital trees and decorating rooms, and doctors and nurses joined in singing carols on Christmas day.

On February 3, an auxiliary luncheon was held at Boxwood Lodge, Lumberton. A business meeting followed, after which we played bridge. Tea was served later in the afternoon. A report from the Tristate luncheon at Trenton was read and A. M. A. plans were discussed.

A business meeting was held at Burlington County Hospital on April 15. May 12 being National Hospital Day, a baby parade, of 200 babies born in Burlington County Hospital, was featured despite inclement weather. Auxiliary members served punch and cakes to all visitors. Graduates of 8 high schools throughout the county attended moving pictures and classes in the nurses' training school.

Twenty-three Hygeia subscriptions were renewed, 21 in schools and 2 in libraries.

On May 27 the Auxiliary invited the Medical Society to a dinner-dance at Medford Lakes Log Cabin. A sociable evening of dancing and bridge followed the dinner.

Our next meeting, and last of this spring, will be a picnic luncheon at the log cabin of Mrs. Lyman Hollinshead at Medford Lakes. This has become an annual affair to which all members look forward.

Hoping to see you all in Philadelphia next week at the A. M. A.

Fraternally,  
Burlington County Auxiliary.

*President Nevin:* Camden County. Is Mrs. Casselman in the room?

*Mrs. William H. Pratt:* Mrs. Casselman sent in her report by Mrs. Lippincott.

*President Nevin:* Is Mrs. Lippincott in the room?

*Mrs. William H. Pratt:* She is here, for I saw her a little while ago.

*President Nevin:* We will go on, and come back to that a little later. Mrs. Frank R. Hughes is President of Cape May County Auxiliary. Is Mrs. Hughes in the room? No. Then let us hear from Essex County.

*Mrs. H. Roy Van Ness* read her prepared report:

#### **Essex County**

We have had 4 meetings during the year with speakers, followed by a social hour and tea.

Our treasury shows a balance of \$466.88.

Fifteen new members have been added to our membership list, and having dropped 37 members for nonpayment of dues, we have now a total of 173.

This year the auxiliary has been carrying out the plans which were given in our report a year ago. We are glad to report that our lecture course on "Child Training" was very successful, which is shown by the demand for lectures again next fall. Our proceeds were \$14.25. Our course on "Infant and Maternal Care" is included in the educational program of the Y. W. C. A., and 20,000 more circulars were sent out during the year.

We sent out 1000 slips announcing the details concerning Hygeia, and also advertised it in 150 dental circulars, but our returns were only 12 subscriptions for the year. We also sent to the



American Medical Association for a list of subscriptions expiring and have solicited those subscribers.

Fifteen dollars was donated to the Red Cross Emergency Fund. Our Scholarship Sinking Fund is well under way, 2 social affairs, a card party and theatre benefit, having contributed \$441.80 toward its establishment.

The question which our medical men asked us to solve—"what can be done for small children when it becomes necessary for the mother to go to the hospital", has been taken up in part only.

After communicating with the Children's Aid Society, in Newark, we found no provisions had been made to handle this problem among the poor, so we have taken the matter before the Welfare Organization and it is going to investigate. The Mother Agency, which would take care of the matter among those who could pay, has been left for the next year's program.

We are dividing the names of Essex County Society members who are not already members of the "Society for the Relief of Widows and Orphans of Medical Men of New Jersey" among a large committee, and between now and the first meeting in the fall we expect to solicit personally the wives and families of these men, in an effort to obtain a 100% membership, if possible.

Our annual meeting in the fall will be a luncheon and fashion show. An invitation will be sent to all eligible members in Essex County in the hope of increasing our membership.

Respectfully submitted,

Mrs. H. Roy Van Ness,  
President.

*President Nevin:* Gloucester County. Is Mrs. Downs in the room?

*Mrs. George L. Orton:* Mrs. Downs is here, I saw her in the hall.

*President Nevin:* We will pass that for the time being, and go on with Hudson. May I ask Mrs. Hubbard to take the Chair while I read the report from Hudson County?

Mrs. Hubbard took the chair.

#### Hudson County

The Hudson County Auxiliary has 112 members. It has held 5 business meetings during the year, with an average attendance of 40. Whenever it has been possible, we have had speakers on educational topics address us at such meetings. In February, Mrs. Taneyhill lectured to us on "Mental Hygiene"; in March, Mr. Bernard Coleman, President of the Jersey City Health Council, told us of the intensive work that is being carried on against tuberculosis in Hudson County. Our mid-winter card party enabled us to aid 5 worthy charities, and our May Day gathering, at the Arcola Country Club, closed a very successful year.

Mrs. Nevin resumed the chair.

*President Nevin:* Hunterdon County. Is Mrs. Floyd A. Thomas here?

*Mrs. W. E. McCorkle:* I don't believe that Mrs. Thomas has come, and she did not send in any report by me, but I can say:

#### Hunterdon County

We have followed our usual practices throughout this year. At Christmas, we sent presents for the older folk and for the children at Glen Gardner. We also had a luncheon meeting at Glen

Gardner, at which Mrs. Taneyhill was present, and gave us a talk. We have had several other luncheon meetings, I believe 2 or 3, in which we have talked over things that we could possibly do. It is very hard to get the members out to meetings in Hunterdon County, but we are working hard on it, and we seem to be arousing more interest. This is only our second year.

*President Nevin:* Will Mrs. D. Leo Haggerty please report for Mercer County.

Mrs. D. Leo Haggerty presented her report.

#### Mercer County

In my 2 minutes, I would like to concentrate upon what I consider the outstanding accomplishment of our Mercer County group. At our first meeting in the autumn, which was a dinner meeting, we organized what we called our Speakers' Bureau Committee, with 3 members on the committee: Mrs. William C. Ivins, Chairman; Mrs. Nesfield, the wife of the City Physician, and Mrs. James J. McGuire. Our first step, after organizing that committee, was for the Chairman and myself to ask permission to meet with the Executive Board of the Mercer County Parent-Teacher Association. We asked permission to get in touch with the 63 Parent-Teacher Associations in Mercer County, to have them put through with us a definite policy program. We then wrote a letter, which was mimeographed and sent out to the 63 Parent-Teacher Associations in Mercer County. Then, they knew we were in existence. Immediately we began to get responses to that letter. In the meantime, we had induced one of our physicians to prepare a very fine paper on "the common cold", and as soon as we heard from as many of the Associations as responded, copies of that paper were sent out. That first paper was sent to the whole 63 Associations, and we understand it was read at most of the meetings.

Then we began to get inquiries for speakers, so we had one of our doctors prepare a speech, and he has been going out and delivering this to the various associations. Also, in connection with Mothers' Day, we accepted the new significance of Mothers' Day, "cutting down the maternal mortality rate", and prepared a paper which we got out ourselves. We had this mimeographed and sent out to the associations, and had it read by their Program Chairmen. We checked up on this, and found 1 Association which had this paper mimeographed, at the expense of the local school, and distributed to 150 people; so, we felt it got somewhere.

We asked the Program Chairman, in addition to using this health material, to appoint someone in her group, who was able to speak fairly well, to give to the group matters of parent local health interest in the community in which that association worked. We got that material from the City Physician's office, and City Health Officer's office, and put it into form and sent it out to the associations.

We feel that in this way we have accomplished that first purpose of our Auxiliary, which is "to aid in the spreading of propaganda for preventive medicine". (Applause.)

*President Nevin:* I see that Mrs. Downs has come into the room, so we may now hear from Gloucester County.

Mrs. E. E. Downs read her prepared report.

### Gloucester County

It is with pleasure that I submit the following report of the Woman's Auxiliary to the Gloucester County Medical Society. At the present time we have a membership of 27 but of this number 8 only take an active part in the affairs of the auxiliary.

During the past year we had 8 very pleasant meetings. On those occasions the future activities of the auxiliary were discussed. We hope that a greater number of the members will hereafter take an interest in our organization.

We have been coöperating with Mrs. Walter Jackson Freeman in her plans for the coming convention of the Woman's Auxiliary to the American Medical Association.

Respectfully submitted,

Mrs. E. E. Downs.

*President Nevin:* Middlesex County.

*Mrs. Edward Clarke:* Middlesex is not functioning.

*President Nevin:* Will Mrs. Herrman please report for Monmouth County.

### Monmouth County

After a difficult birth in 1928, the Woman's Auxiliary of Monmouth County went into a state of coma, from which it was revived recently by the tender ministrations of our State President, Mrs. John Nevin, and Mrs. George N. J. Sommer, in January 1931. After a most enlightening and encouraging consultation, we took up the spark of life and resumed our career. On April 4, Mrs. H. Roy Van Ness, President-Elect, outlined a plan of growth for us. Since then we have progressed at a rapid rate, and now, having passed through a period of convalescence, we feel that we are substantially organized and will carry on as a husky group.

We have 20 paid members. Our Hygeia Chairman reports 8 subscriptions. We have a Membership Committee which is to call upon all doctors' wives, and we feel that soon the wife of every doctor in the county will be enrolled in our Auxiliary.

*President Nevin:* Mrs. Frank Denniston will speak for Ocean County.

### Ocean County

We have had 4 meetings during the year. The last one was a purely social affair. It was a card party, and we invited the doctors and their wives, who were not already affiliated with us, thus hoping to swell our number. It was very successful. I think the high spot was reached at the January meeting, at which our kind and gracious President, Mrs. Nevin, came all the way from Jersey City to be with us. She gave us a lot of new ideas and good suggestions and filled us with inspiration to carry on for the coming year.

*President Nevin:* Passaic County.

Mrs. William Neer presented her prepared report.

### Passaic County

We have 4 meetings a year, January, March, May and October. The last meeting in 1930 was held in the Woman's Club. After the business meeting Mrs. Tuers gave a delightful description of a cruise to the North Cape, thence to various European countries, and finally to Oberamgau to see

the Passion Play. Miss Cornforth, of the Girls' Advisory Bureau, spoke on the need of city and county to better their protection and care of the youth of today. She spoke of the great need of a detention home.

At the January meeting, after our business session, we had Mrs. James Radcliffe, President of the Day Nursery, tell us of the daily routine of the Nursery, and she invited us to visit it at some later date. It was a very interesting talk. Miss A. McGeachie, supervisor of corrective speech in our public schools, told us of the work being done in that line in our city. Miss Elizabeth K. Watson gave a most interesting talk on the work for backward children. Miss Watson is head of that department in the schools of Paterson.

In March Mrs. Taneyhill gave her lecture on "Mental Hygiene" in the Auditorium of the Woman's Club, which was open to the public. This was a special lecture sponsored by our auxiliary. It was well given and very well attended.

At our March meeting Miss Meta De Loche, of the Tuberculosis League, gave us a day's program, with moving pictures, showing the work being done with these children in the summer camp.

At our May meeting we had the pleasure of having as our guest Mrs. John Nevin, our State President, who gave us a very delightful talk on the work of other county auxiliaries, throughout the state. She particularly stressed the advantage of selecting some one object or idea and working steadfastly with that in mind.

We have a social hour and serve refreshments at every meeting.

Respectfully submitted,

Catharine Neer (Mrs. Wm.)

*President Nevin:* Somerset County.

Mrs. Clarence R. Kay presented this report.

### Somerset County

The Somerset County Auxiliary holds meetings every other month in conjunction with the County Medical Society, and has been occasionally asked downstairs to hear papers, particularly when that society had some speaker who might interest our members. We had placed Hygeia, at our own expense, in all the High Schools and in all the Public Libraries in the county. In addition to that, we have felt that our meetings were successful because we have increased our friendship and fellowship thereby. Our county is rural, to a great extent, and most members have to come considerable distances. While our average attendance does not include perhaps more than half of our membership, we have still felt that our meetings were worth while, and that by attempting to hold the interest of those who already are coming we can persuade the others to join us.

*President Nevin:* Union County, Mrs. Hubbard.

Mrs. Harry V. Hubbard presented her prepared report.

### Union County

Since the fiscal year of the Woman's Auxiliary to the Union County Medical Society runs from October to October, I will report the activities already accomplished and those planned for the rest of this year.

During the year we will have held 4 regular



business meetings and 3 special meetings. The business meetings were held concurrently with those of the County Medical Society—quarterly.

At an executive meeting in January some activity was planned for each month from then until July, on the following schedule, for the year:

October and January, regular business meetings.

February—The luncheon was held in Elizabeth. Mrs. John Nevin, State President and Mrs. H. Roy Van Ness, State President-Elect, were the guest speakers. A musical program was also enjoyed.

March—A luncheon-bridge was held in Plainfield, at a tea room.

April—At the April business meeting a special program was given. Mrs. John Nevin, of Jersey City, added much to it by a review of current books and authors. Mrs. A. Russell Shirrefs concluded the program with an illustrated lecture: "How to Make a Small Garden."

May—A golf tournament and bridge party, followed by a dinner, for both men and women, held in a country club.

June—The State and American Medical Association meetings occur.

July—The quarterly business meeting.

At each meeting and party some member has been repaid for her attendance by being the recipient of a door prize.

As usual, we have awaited suggestions from the Medical Society as to any new, special, constructive work, and have done our best with the 2 tasks already assigned to us.

Through our campaign last year all the libraries in the county are now subscribing to Hygeia. The Chairman, Mrs. George Laird, of Westfield, has secured 12 other yearly subscriptions—5 of which are in doctors' offices. On May 1, 80 postals were mailed to our members soliciting subscriptions; with small returns, as yet. The Chairman reports the attitude of physicians and our members toward subscribing to the magazine as "indifference".

The time allotted to Union County by the State Society Field Secretary was upon us before we realized it, and we could not do anything in placing her. She spoke about her work at our luncheon in February, and has had a number of lecture engagements in Union County, but it has not been as a direct result of Auxiliary work.

We would welcome suggestions as to how to accomplish more in these lines of work.

Our paid-up membership so far this year is 60.

We have contributed to the funds for the State and National meetings, and are represented on the committee which is planning for both meetings.

I hereby express my thanks to all who have helped with these programs.

Respectfully submitted,

Viola B. Hubbard, President.

*President Nevin:* Warren County. Is Mrs. Bloom here?

Well, you have heard the very encouraging reports of all of the County Presidents who are present. Is Mrs. Lippincott in the room? I understand that she has Mrs. Casselman's report.

*Mrs. William C. Raughley:* The Secretary of Camden County Auxiliary is here, Mrs. Pratt.

*Mrs. William H. Pratt:* Mrs. Casselman sent in her report, but I haven't it.

*President Nevin:* You have heard the very encouraging reports of work done throughout the counties during the past year. What is your pleasure?

*Mrs. Edward Clarke:* I move that the reports be accepted, as read, and filed.

*Mrs. Theodore Teimer:* I second the motion.

The motion was unanimously carried.

*Mrs. Daniel F. Featherston:* Mrs. Herrman is very anxious that all of you should know that the buses will be at the Berkeley at 1 o'clock, and there will not be card games on the boat because the voyage is not very long, and the scenery is very lovely. We think it would be much better to admire the scenery than to sit inside and play cards. We would like you to know that you are the guests of the Auxiliary of Monmouth County.

*President Nevin:* May I say at this time that we are very, very much indebted to the members of the Monmouth County Auxiliary for their generous hospitality. I feel that our Auxiliary has missed a good deal in not having had them in the organization before today, and in spite of the fact that Mrs. Herrman has said that they were convalescing. I would say that their actions prove that they are much, very much, stronger than convalescents. Yesterday they had a most delightful entertainment over at the Asbury Park Hotel, and the pity of it was that it was not advertised more so that we might all have learned then of their very generous and bounteous hospitality. It was truly delightful, and I feel, and know, that they are going to be a very valuable acquisition to the State Medical Auxiliary.

The following Nominating Committee has been appointed (when a presiding officer mentions "nominating committee", she feels that her Swan Song is about to be sung) (laughter): Mrs. H. H. V. Hubbard, Mrs. D. Leo Haggerty and Mrs. William Neer.

I have just noticed that Mrs. Lippincott is here. Is it true that you have the Camden County report?

*Mrs. A. Haines Lippincott:* I am sorry I was not able to be here sooner but I had a long distance telephone call that delayed me.

Mrs. Lippincott read the prepared report of Mrs. Casselman.

#### Camden County

We have had 4 meetings, 2 of them business meetings with speakers, and 2 social with speakers.

We have amended our constitution to agree with the National Auxiliary Constitution.

Probably our greatest achievement, if we have achieved anything, has been the meeting which

we held in January, when we invited representatives of all Parent-Teacher Associations, Women's Clubs, Hospital Auxiliaries, etc., in the county. At this meeting, which was attended by approximately 200 women, the President in a brief address made clear the aims of the Auxiliary, and asked these different organizations to make use of the Auxiliary's health educational program. Our National President was present and discussed the program. Mrs. Walter Jackson Freeman was also present. We had as our main speaker, Dr. Francis Green, Headmaster of Pennington School for Boys. He probably was the reason for our large attendance, for we really used him as a drawing card to get our crowd. However, with all our efforts, we have not had one single call for speakers who are directly connected with the Medical Society's Health Program.

Our social meeting in May is an annual affair. We combine our luncheon with the entertainment of the mothers of our physicians. As usual, it rained all day, and as the meeting was held at Medford Lakes, we were afraid our attendance would be small. We had 47 women at this meeting; 9 of them physicians' mothers. Our State President was at that meeting. She addressed us in her usual delightful manner. I wish I had time to tell more fully of this affair.

We have contributed to our local unemployment fund \$10 from our treasury, and from individual members \$20, making a total of \$30.

In conclusion, I will say that we have held together. We have really done nothing. Playing cards, luncheons, teas, etc., will bring any group of women out, but it seems to me that this is not entirely our aim. Unless we are given a very good tonic, I am afraid that we will go into a decline, and you all know the result.

Very respectfully submitted.

Zula Casselman, President.

*President Nevin:* At an Executive Committee meeting held last fall the following committee was appointed to revise the constitution: Mrs. James Hunter, Chairman; Mrs. Edward Clarke and Mrs. H. Roy Van Ness.

Speaking of Mrs. Hunter, whose plans were so complete to be with us here today, reminds me of the words of our Divine Master: "Today is for them; tomorrow for Me." We tenderly mourn the passing of Dr. Hunter, and offer our most sincere sympathy to our beloved former President and his sorrowing loved ones, while we pause and offer a silent *de profundis* that Dr. Hunter's gentle spirit is at rest.

Silent prayer.

*President Nevin:* Mrs. Van Ness will act as Chairman in Mrs. Hunter's absence.

*Mrs. H. Roy Van Ness:* May I say that we are taking up the Constitution today by order of the Executive Board just to carry through, as we cannot complete the actual changes, because the amendments were not in the President's hands 60 days in advance of this meeting. Therefore, we will have to wait until our next annual meeting, in June 1932, to make any changes, but we want to

take up the changes proposed, in order that you may understand them.

May I ask you please to tell me how you wish this to be handled. Do you wish to consider it article by article, the proposed changes against the provisions in the constitution; or, do you wish the old constitution read as a whole and then the new proposed changes?

*Mrs. Theodore Teimer:* I would suggest that you compare the old with the new.

*Mrs. George N. J. Sommer:* Will it be possible to do that? I would like to suggest, as the changes are so radical, and will not follow through article for article, the proposed constitution with the present constitution, that we take up the proposed constitution and have pointed out the differences.

*Mrs. Rogers:* As the articles do not correspond, the one with the other, the sections should be taken and the differences pointed out.

*Mrs. Van Ness:* We can take it up section by section, but it will not be possible to compare the old with the new over the entire constitution as they do not exactly follow through.

*Mrs. A. Haines Lippincott:* I am on the Revision Committee of the National Constitution, and I would just like to say here that there are to be a number of changes in the National Constitution, so I think it is really very fortunate that you are not making your entire change at this time, because you may have to make some additional ones to conform with the National Constitution a little later on. You have, perhaps, received notification of this change; but I do not think so. It is to the effect that newly formed state auxiliaries shall pay an initiation fee of \$5 in order to obtain representation, and there are other things that are coming in for the older auxiliaries that may affect us.

I believe if the Chairman would describe salient points of change, where it is going to be radically changed, that would be the better way, as I do not believe you can compare the old and the new at all.

Therefore, Madam Chairman, I believe it would be a good idea to read this new constitution as a whole, and as it is being read have the Chairman state the important changes, and if there is something that is vitally necessary to put into operation this year to correspond with the National Constitution, we can have passed an emergency resolution to cover that.

*Mrs. Edward Clarke:* I second that.

The motion was carried.

*Mrs. H. Roy Van Ness:* All right, I will read the new constitution through and try to indicate all the changes wherein it differs from the present constitution.



ARTICLE I. Name. The name of this organization shall be The Woman's Auxiliary to the Medical Society of New Jersey.

That carries over from the present constitution, word for word.

ARTICLE II. Object. The object of this Auxiliary shall be to assist the Medical Society of New Jersey in:

(1) Advancing the cause of preventive medicine.

(2) Securing adequate medical legislation.

(3) Promoting good fellowship among physicians' families.

(4) Doing such supplemental work as may be suggested by the Medical Society.

There is a clause in our present constitution which was not in the proposed constitution as printed, but which has been passed by the Executive Board, and which I would like to have put in. I shall read it now:

"It shall not take any action contrary to or independent of the advice of the Medical Society of New Jersey."

I think it is necessary that we have that in our constitution. That sentence has been taken from the present constitution and inserted in the proposed new constitution.

ARTICLE III. Component Auxiliaries. Component Auxiliaries shall be those County Auxiliaries authorized by the respective County Medical Societies.

We have not Article III or its equivalent in our present constitution.

ARTICLE IV. Membership. The membership of this Auxiliary shall consist of members in good standing in the component County Auxiliaries.

Under the next Article, dealing with officers, there are quite a number of radical changes, so I will not read the present Constitutional provisions at all. You have the same thing in your County Auxiliary, so you will be able to compare the proposed new Article with the present Article. This is the proposed.

ARTICLE V. Officers. Section 1. The officers of this Auxiliary shall be a President, 3 Vice-Presidents, a Recording Secretary, a Corresponding Secretary, a Treasurer, and 6 Directors.

*Mrs. A. Haines Lippincott*: No president-elect?

*Mrs. H. Roy Van Ness*: Wait a minute, I am coming to that. There is one, in that it provides later on that during the interim the First Vice-President shall hold the title of President-Elect.

*Mrs. A. Haines Lippincott*: I don't get that. If it is not specifically provided that there be a President-Elect, it will not correspond with the National Constitution.

*Mrs. H. Roy Van Ness*: It is specifically mentioned in the present constitution. I do not

know whether it may have been omitted from this present proposed one by the printer. Later on in the Article, President-Elect is definitely mentioned. It may, therefore, be due to an omission by the printer.

I will go on reading the article:

These officers, with the exception of the President, the Directors, and the Corresponding Secretary, shall be elected at the annual meeting to serve for 1 year or until their successors are elected. The term of office of the President shall begin at the close of the next annual meeting following her election. During the interim she shall hold the title of President-Elect, and shall be *ex officio* a member of the Board of Directors but without the right to vote. The Corresponding Secretary shall be appointed by the President. The Directors shall be elected for 3 years, 2 to be elected at each annual meeting. All the officers, except the Corresponding Secretary, shall be elected by ballot, unless there is only 1 candidate for an office, when by unanimous vote the ballot for that office may be dispensed with.

In the old constitution, or present constitution, it is stated that standing committees shall be appointed annually by the Executive Board. There is no mention of that in the proposed constitution. Anyway, it has been customary for the President to appoint the Chairmen of the various committees, so this will really be no departure.

*Mrs. A. Haines Lippincott*: Hasn't the President appointed those Chairmen with the approval of the Executive Board? I know that is the way it was done during my régime.

*Mrs. H. Roy Van Ness*: I don't think we have worked it out exactly that way. Do you want that specified, that it shall be done that way, or that the appointments shall be made by the President?

*Mrs. A. Haines Lippincott*: I think it should be by the President with the approval of the Executive Board, because those members become automatically members of your Executive Board and have a vote, and I think the Board itself should, therefore, have a say as to who they should be.

*Mrs. H. Roy Van Ness*: Then you want taken from our present constitution the provision "Standing Committees shall be appointed annually by the Executive Board", but you wish it changed to read "Standing Committees shall be appointed annually by the President with the assistance of the Executive Board".

*Mrs. A. Haines Lippincott*: No, with the approval of the Executive Board."

*Mrs. H. Roy Van Ness*: Standing Committees shall be appointed annually by the President with the approval of the Executive Board, is that right?

*Mrs. A. Haines Lippincott*: Yes.

*Mrs. H. Roy Van Ness*: To go on:

ARTICLE V. Section 2. A Nominating Committee of 5 members, no more than 2 of whom shall be members of the Executive Board, shall be elected at the regular annual meeting from among the delegates present. It shall be the duty of this Committee to nominate a candidate for each office representing as many counties as possible to be filled at the next annual meeting. This ticket shall be posted in a conspicuous place 24 hours before the election.

May I say that this is one of the emergencies that we wish to have passed on now because we find it quite essential that the Nominating Committee be appointed at our meeting tomorrow, so that we will not have to get our nominees over night, and in order that we will have a whole year in which to select proper candidates or nominees. Therefore, this year we are going to ask the same Nominating Committee to carry over for our next annual meeting, if it meets with your approval, and then hereafter it will be reappointed at each annual meeting, for the next year. Later on we shall include this in an emergency resolution that we hope you will pass.

Section 3. A vacancy occurring in any office shall be filled by the Executive Board for the unexpired term.

The next Article, Article VI., dealing with the duties of officers, carries through the same as we have in our present constitution:

Section 1. The duties of the officers shall be those which usually devolve upon such officers as described in these by-laws and in Robert's Rules of Order, Revised.

There has been added to it the following:

Section 2. The Treasurer shall disburse money only on written order signed by the President. Her books shall be audited annually by 2 members of the Executive Board.

Heretofore, the Treasurer has only disbursed money on the written order of the President, but it has not been in the constitution.

ARTICLE VII. Meetings. Section 1. A regular meeting of this Auxiliary shall be held at the same time and place as that of the State Medical Society. A notice of this meeting shall be sent to all County Auxiliaries and to all members of the Executive Board at least 60 days before the meeting.

Section 2. Each County Auxiliary shall be entitled to 1 delegate for every 20 paid-up memberships or fraction thereof.

There has been a change there because heretofore we were all allowed 3, but the Committee felt that now that the counties are better organized we should specify 1 to every 20 paid-up memberships or fraction thereof.

Continuing:

The number of paid-up memberships shall determine the number of delegates to the annual

State Auxiliary meeting to which each County Auxiliary is entitled.

Section 3. The meetings of this Auxiliary shall be open to all members of the County Auxiliaries, but the privilege of making motions, debating, and voting shall be limited to the Executive Board, the Chairman of Special Committees and the duly accredited delegates.

Section 4. Credential cards for delegates and alternates, the number of such cards based on the dues paid by each County Auxiliary, shall be sent by the State Treasurer to the President of each County Auxiliary on the first day in April annually. They shall be made out in duplicate and signed by the President of each County Auxiliary, 1 to be given to each delegate and alternate, the duplicate to be sent to the Chairman of the Committee on Credentials. Changes in alternates may be made only on written request to the Chairman of the Committee on Credentials, signed by the President of a County Auxiliary.

Section 5. A majority of the voting members registered as attending the meetings of this State Auxiliary shall constitute a quorum.

*Mrs. A. Haines Lippincott:* May I go back just a moment in regard to the representation. I think that is a very good thing, to have it according to the number of members in each county, but I do think the President of each County Auxiliary should be a delegate. I think it should read: "The President and one delegate for every 20 paid-up memberships or fraction thereof."

*Mrs. H. Roy Van Ness:* The President should act as a delegate?

*Mrs. A. Haines Lippincott:* Yes, she should be by the voting body, the President of each County Auxiliary; then, as to the other representation, it should be 1 to every 20 paid-up memberships or fraction thereof. I think that is really a very much better thing.

*Mrs. H. Roy Van Ness:* That is in our old constitution.

*Mrs. A. Haines Lippincott:* Yes, but the representation from each county is the same. For instance, Essex has as much representation as Salem. That is not fair, because Salem has fewer members than Essex.

*Mrs. H. Roy Van Ness:* The President should act as one delegate besides the others provided.

*Mrs. A. Haines Lippincott:* Yes, that will make your body larger and more important, and give your County Auxiliary President some standing in the Convention.

*Mrs. H. Roy Van Ness:* I think that is a good change.

ARTICLE IX. Executive Board. This is not taken up at all under Executive Board in the present constitution.

Section 1. The management and control of this Auxiliary shall be vested in an Executive Board which shall consist of the Officers and the Chairmen of Standing Committees. At Executive Board meetings the President-Elect shall have a voice but no vote.

Section 2. The Executive Board shall have all



power and authority over the affairs of this Auxiliary in the interim between the meetings of the Auxiliary, except that of modifying any action taken by the Auxiliary.

Section 3. (a) Regular meetings of the Executive Board shall be held immediately before and immediately after the Annual Convention.

(b) The Executive Board will also meet on the second Monday in October, January and April at the time and place selected by the President, the January meeting to be an open meeting. The April one was not included in our present constitution, nor was the time specified; but we thought it would be wise to specify the time and make it uniform throughout the state when these meetings would be held.

Section 4. Special meetings may be called by the President, and must be called upon the written request of 7 members of the Board. Notice of such meetings shall be mailed at least one week in advance of the meeting to all members of the Board.

Section 5. Business may also be transacted by mail, if necessary.

Section 6. Seven members of the Executive Board shall constitute a quorum.

Under dues, it reads almost the same in the newly proposed constitution as in the present constitution:

ARTICLE X. Dues. Section 1. Each county Auxiliary shall pay dues to the State Auxiliary at the rate of 50 cents per capita, 25 cents of which shall go to the National Auxiliary.

Section 2. The fiscal year of the Auxiliary shall be from March 1 to the last day of February. Representation at annual meetings of this Auxiliary shall be based entirely on dues received by the State Treasurer before midnight of February 15 annually.

Section 3. The State and County Treasurers shall use the form of receipt prescribed by the National Auxiliary.

You will notice that there is a change in the date of the fiscal year, but that otherwise it is almost the same.

*Mrs. A. Haines Lippincott:* May I read the revision that is to be made to the National Constitution?

*Mrs. H. Roy Van Ness:* Do.

*Mrs. A. Haines Lippincott:* It will come under Section 1, and will read: "The annual dues of each State Auxiliary shall be 25 cents for each of its members, which shall be in the hands of the National Treasurer not later than March 31." That would make it about right. This is a change, too, in the National Constitution.

*Mrs. H. Roy Van Ness:* We have changed ours to meet the change in that. We knew it was coming in.

*Mrs. A. Haines Lippincott:* That is vital. This change has to be made in order to make our constitution conform to the National Constitution.

*Mrs. H. Roy Van Ness:* May I interrupt at this time to ask that we have throughout the state a regular annual meeting date and

also a regular fiscal year. Due to the fact that the different counties elect their presidents at different times, we have a great deal of confusion as to the officers who are actually in office at a given time. Often we send out notices to those who, according to our records, are the Presidents of County Auxiliaries, only to be informed that they have gone out of office, the annual meeting having occurred in the meantime. Therefore, at the Executive Board meeting, we decided that we would ask all the counties to have their annual meeting in October, so all would be uniform; and that at that time a notice should be sent by them to the State Society giving their new officers and chairmen of their various committees. In that way we know whom we have to work with throughout the year, and will not be embarrassed by writing to those who have gone out of office.

We are also going to suggest that you have your fiscal year end December 31, have it run from January 1 to December 31. This will eliminate a great many of the errors that now occur in the payment of dues, and will enable the Treasurer to keep her books straight. A good many times when Mrs. Clarke sends a notice for 1930 dues, she receives a reply that the 1930 dues have been paid. This is due to the fact that, for instance, dues were paid in May 1930, and it is supposed they were for 1930, when in reality they were for 1929 even though they were paid in May 1930. If we can have our fiscal year end December 31, and start our new year with January 1, it will eliminate a lot of those errors and misunderstandings.

*Mrs. A. Haines Lippincott:* Doesn't your annual meeting usually occur at the end of your fiscal year? Here you have 2 different dates provided.

*Mrs. Edward Clarke:* That is not always so.

*Mrs. H. Roy Van Ness:* It is very easy to change it if you are doing it that way. You can have your annual meeting in October and your fiscal year end December 31. If there is to be a change in treasurers, it gives your treasurer time to collect dues and a time to close the books. If you are changing treasurers, you cannot close your books immediately, as some of your checks may be outstanding, and there is a little interim there, and you have time to have an audit made.

*Mrs. A. Haines Lippincott:* It is a good thing, but unusual.

*Mrs. H. Roy Van Ness:* We do it that way in Essex County, and it works beautifully.

*Mrs. A. Haines Lippincott:* But your an-

annual meeting should always be at the end of your fiscal year.

*Mrs. H. Roy Van Ness:* I don't believe that is compulsory. I believe the men found the same trouble we have encountered in paying their dues to the National. When they paid their dues in May 1931, for instance, they got confused as to whether they were for 1930, or for 1931 in advance, because the fiscal years of both were different.

*Mrs. A. Haines Lippincott:* That would eliminate a lot of confusion.

*Mrs. H. Roy Van Ness:* Yes, and you will get notices from us later on giving the full details, if you think favorably of this change. These full details will outline how the matter may be facilitated both in the county and state.

**ARTICLE XI. Standing Committees.** (a) Standing Committees shall be appointed annually by the President and confirmed by the Executive Board to serve for one year. (b) No officers may serve as chairmen of standing committees.

**ARTICLE XII. Delegates to the Annual Meeting of the Woman's Auxiliary to the American Medical Association.** Section 1. There shall be 1 delegate and 1 alternate, to the annual meeting of the Woman's Auxiliary to the American Medical Association, for every 100 members or fraction thereof in this State Auxiliary.

Section 2. These delegates and alternates are to be selected from the membership at the preceding annual meeting.

**ARTICLE XIII. County Auxiliaries.** Section 1. A Woman's Auxiliary to the County Medical Society may be formed in any county of the state, provided the County Medical Society has first given its approval in writing. Only 1 Auxiliary in any given county shall be recognized as a member of the State Auxiliary.

Section 2. Wives, mothers, daughters and sisters of members of a County Medical Society in good standing, or who at the time of their decease were in good standing, shall be eligible to membership in a County Auxiliary. All doubtful cases shall be referred to the County Medical Society's Advisory Committee. (Art. XIII, Sec. 5.)

Section 3. Any woman eligible to membership in the auxiliary who, for geographic reasons, finds it more convenient to join an auxiliary outside of her own county, may do so with the written consent of the Executive Board.

Section 4. Each County Auxiliary shall send to the State Auxiliary President, not later than May 1 annually, a complete report of its activities for the year.

Section 5. Each County Auxiliary shall request the County Medical Society to appoint an Advisory Committee of 3, with which the auxiliary shall confer on all questions of policy and outside activities. No outside work shall be undertaken without the knowledge and consent of this committee.

**ARTICLE XIV. Parliamentary Authority.** The rules contained in Robert's Rules of Order, revised, shall govern this Auxiliary in all cases to which they are applicable, and in which they are not inconsistent with these By-Laws.

**ARTICLE XV. Amendments.** These By-Laws may be amended at any regular meeting of this Auxiliary by a two-thirds vote, provided a copy

of the proposed amendment shall have been sent to each County Auxiliary at least 60 days before the meeting.

Respectfully submitted by  
the Committee on By-Laws:

Mrs. James Hunter, Chm.,  
Mrs. Edward Clarke,  
Mrs. H. Roy Van Ness.

*Mrs. A. Haines Lippincott:* May I ask when the delegates to the National Auxiliary are selected?

*Mrs. H. Roy Van Ness:* Delegates and alternates are to be selected from the membership at the preceding annual meeting.

*Mrs. A. Haines Lippincott:* You mean that for this year they should have been elected last year?

*Mrs. H. Roy Van Ness:* Yes, that is the idea.

*Mrs. A. Haines Lippincott:* That is very difficult. They do not know whether they are going or not, and this affects greatly those whom you elect.

*Mrs. H. Roy Van Ness:* The A. M. A. usually meets before we do.

*Mrs. A. Haines Lippincott:* They did not last year.

*Mrs. E. R. Mulford:* I think the A. M. A. always meets after our society.

*Mrs. Theodore Teimer:* Couldn't they be appointed at the mid-winter meeting? We have a mid-winter meeting in Trenton.

*Mrs. A. Haines Lippincott:* It is very difficult then to know who is going to the A. M. A. at that time.

*Mrs. E. R. Mulford:* Why don't we try to do as the men do? They appoint their delegates at this meeting for the meeting in Philadelphia.

*Mrs. H. Roy Van Ness:* Yes, they do; otherwise they would not know who was going to attend.

*Mrs. A. Haines Lippincott:* If you appoint your delegates this year for next year, and it is out in San Francisco, then you are going to have trouble. Many of us would not go if it were so far away, while we might go if it were near. The trouble is that this year we do not know whether we will attend the A. M. A. Convention of next year, or at least most of us do not.

After a lengthy discussion of this question, participated in by Madames Lippincott, Van Ness, Mulford, Clarke and Orton, it was decided to make Section 2 of Article XII read: "These delegates and alternates are to be selected from the membership at the preceding January open meeting."

*Mrs. H. Roy Van Ness:* Mrs. Clarke has the resolution that we would like to pass as an emergency measure to carry through until the fiscal year.



*President Nevins:* Mrs. Clarke will read the portion of the constitution, or rather the emergency measure, that we would like to have passed upon by you today.

*Mrs. Edward Clarke:* May I propose an emergency resolution in reference to the Constitution? "A nominating committee of 5 members, no more than 2 of whom shall be members of the Executive Board, shall be elected at the regular annual meeting from among the delegates present. It shall be the duty of this committee to nominate a candidate for each office to be filled at the next annual meeting. This ticket shall be posted in a conspicuous place 24 hours before the election. A vacancy occurring in any office shall be filled by the Executive Board for the unexpired term. The fiscal year of the Auxiliary shall be from March 1 to the last day of February. Representation at the annual meetings of this Auxiliary shall be based entirely on dues received by the State Treasurer before midnight of February 15 annually. The State and County Treasurers shall use the form of receipt prescribed by the National Auxiliary."

*Mrs. A. Haines Lippincott:* May I interrupt there to say that I thought the fiscal year was to end the thirty-first of December.

*Mrs. Edward Clarke:* That is for counties; this is for the state.

"Delegates and alternates to the annual meeting of the Woman's Auxiliary to the American Medical Association. These delegates and alternates are to be selected from the paid-up membership at the preceding January open meeting."

*Mrs. H. Roy Van Ness:* There has been a private discussion up here among a few of us as to whether we could put it in our constitution that the fiscal year of the County Auxiliaries shall end December 31. Frankly, I do not think we have the power to do that. We cannot change the rules of the individual County Auxiliaries on that point, especially as they may have some definite ones against it.

*Mrs. A. Haines Lippincott:* Why not suggest it to them? Have it read that you will suggest it to them.

*Mrs. H. Roy Van Ness:* We have suggested that it be done. Someone has said that it cannot be changed this year. May I tell you how it can be? We did it in Essex County very successfully, and there was no confusion at all in the transition. If your fiscal year ends in May and you want it to end in December, if you have not your bills for the next year's dues sent out, hold them over until the first of January. On the other hand, if you have sent your bills out on May first,

don't take any action on them. If people have already paid those May 1 bills, hold the money and apply it on the next year's dues, or on the dues that should be paid January 1.

*Mrs. H. H. V. Hubbard:* Could not that be left to the discretion of the counties, how that could be worked out?

*Mrs. H. Roy Van Ness:* That is just the point. In the past it has been left to the discretion of the counties, and it has not worked out at all well. It ought to be uniform. This way, we don't get the dues out in time to send them to the National; and if it is uniform, we will be able to do that. If at the end of May you have sent your bills out, don't send them out the first of January; that will be of your 1931 dues payable on January 1, 1932. If you have not sent out your bills, hold them until January 1, 1932. That is all there is to it.

*Mrs. A. Haines Lippincott:* That will mean that the County Treasurers will receive no dues for one whole year; they will have to forfeit a year's dues.

*Mrs. H. Roy Van Ness:* No, it will mean that from May until December you will not get any dues; but after that it will work out all right.

*Mrs. A. Haines Lippincott:* It works an awful hardship. Your treasury gets terrifically empty in the meantime.

*Mrs. H. Roy Van Ness:* No, it will not make them empty. If you have already sent out your May 1 notices, you may have 1931 dues in your treasuries right now. If you have sent in these 1931 dues to us during the year, we have returned them to you, asking you to hold them until December 31. This is the only opportunity we will have to make this adjustment of dues, and we do so want to do it. The delegates to the 1932 Convention will be based on the dues received after January 1, 1932, by the State Auxiliary. The dues that you have paid this year, and which have been accepted by the State Auxiliary, are only arrearages on 1930 dues; we have no 1931 dues in our treasury.

*Mrs. W. S. Kells:* Our annual meeting is in October. You say the dues have to be paid on December 31. That means, doesn't it, that for 2 months we will have to pay a year's dues?

*Mrs. H. Roy Van Ness:* No, this year you will have 14 months; in other words, what are supposed to be this year's dues will cover 14 months instead of the customary 12. Some other county, that has a different fiscal year, may get 15 months instead of the customary 12; some other county 16 months, and so on. That is the only difference it is going to make. Those who have their fiscal year ending in

May will have from May to December free, or 18 months for their year 1931. We have to get this straight this year because if we do not the A. M. A. will not allow us an opportunity to straighten it out again.

*Mrs. H. H. V. Hubbard:* I think we are talking about 2 sets of dues, and I believe that is what is confusing us a little. It seems to me that county treasurers are to close their books on their own individual members on December 31.

*Mrs. H. Roy Van Ness:* Right.

*Mrs. H. H. V. Hubbard:* And they are to send their report then between that date and March 1 to the National.

*Mrs. H. Roy Van Ness:* They are not. There is no in between date. They are to send it on the first of January.

*Mrs. H. H. V. Hubbard:* Between January 1 and February 15 the State Treasurer should have all her reports in from the County Treasurers.

*Mrs. H. Roy Van Ness:* By March 1. Representation in the Auxiliary at annual meetings shall be based on dues received by the State Treasurer before midnight of February 15. The A. M. A. ends March 15.

*Mrs. H. H. V. Hubbard:* Then there are really 3 different sets of dues.

*Mrs. H. Roy Van Ness:* That should not concern the counties at all. They do not need to know anything about the State or National. They will simply send their 1931 dues in by February 15. You have the 1931 dues mostly in your treasuries right now. If you send these dues to us, Mrs. Clarke sent them back. You have the balance of the year up to December 31 to collect the rest of these 1931 dues. At the end of that time you are to send in the pink and blue slips to Mrs. Clarke, and that closes 1931. If you have sent your bills out the first of May, don't send them out next January. Carry it over until the next year January, 1933.

*Mrs. H. H. V. Hubbard:* The County Treasurers should collect their dues in advance?

*Mrs. H. Roy Van Ness:* That is right.

*Mrs. H. H. V. Hubbard:* They collect the county dues in advance, but they pay the State Treasurer back dues.

*Mrs. H. Roy Van Ness:* That's it. On January 1, 1932, you will pay us 1931 dues because you have not paid any 1931 dues this year. No one—and let me impress this upon you—has paid any 1931 dues this year. However, on January 1, 1932, you will pay into the State Treasury your 1931 dues. If you have sent your bills out on May 1 for 1931 dues, don't send them out this January because you already have the 1931 dues in your treas-

ury. You have not sent that money to us, or if you have, it has been returned.

*Mrs. William Neer:* I would like to ask a specific question: Passaic County had bills made out the first of this January. We expected we would pay our fiscal year from January to January, which we have done, as our State Treasurer or rather County Treasurer sent in all the reports and all the money in February. That is all right. Now, all the money that she has collected since, that has been paid in 1931, she will keep until 1932. We have a few who are behind in paying, and since our treasurer sent that money in February to Mrs. Clarke some have sent in \$2 for their dues for 1930 and 1931. What should we do in such a case?

*Mrs. H. Roy Van Ness:* When Mrs. Freeman made those books, she forgot to account for arrears. If someone paid you in June for 1930 dues, immediately the treasurer should send that in to Mrs. Clarke. She should send it in immediately, that day. All arrearages for 1930 should be sent in immediately. We hope to take this up with the County Treasurers in detail later on in order that there may not be any slip-up. This is the last opportunity we have from the American Medical Association to rectify this situation, and we must do it this time or forever be in a muddle. Our representation to the A. M. A. is based on this, and it is important that it be straightened out. It would be a shame if we were to lose out on the number of delegates due to a misunderstanding.

*Mrs. Corunyon:* I am not a delegate; may I speak?

*President Nezin:* Certainly.

*Mrs. Corunyon:* I was just thinking about that provision of having the annual meetings in October. It seems to me that it is very advisable for the County Officers to be elected in the spring so they have their boards together ready to work through the summer and can begin their work in earnest in the fall. If you have your meeting in October, your annual meeting, this cannot be done. It seems to me that in addition to that, if your meeting were held in October, your annual meeting, your treasurer's report would be 9 months behind instead of right up to date.

*Mrs. H. Roy Van Ness:* Few counties act during the summer months. For that reason you have time after the elections to get your committees together just as expeditiously as any other way. Also, it takes your treasurer from October on through November to clear up her books and have them audited. If you are changing treasurers, this time is sorely needed. It gives the old treasurer time to clear things up, and the new treasurer time to



get accustomed to her new duties. If you are not changing treasurers, this is not so important. That is another thing, if your treasurer is willing to go on, don't change treasurers so often. It leads to confusion. We would certainly like the County Societies to keep their old treasurers if this is possible.

*Mrs. Kinch:* Of course, you want your annual report from your treasurer at your annual meeting.

*Mrs. H. Roy Van Ness:* You can have your annual report from your treasurer in October.

*Mrs. Kinch:* But it would then be 9 months old, would it not, if you are going to have your annual meeting in October and your fiscal year end December 31?

*Mrs. H. Roy Van Ness:* No, the treasurer can read her annual report in October. We do it in Essex, and have done it for 4 years, and it works out beautifully. This is the way we do it in Essex: The slate is read in May, of the new officers, and most always, I think in every county, you will find that those officers go in as a matter of course. Those officers work with the present Executive Board at an Executive Board meeting during the summer, planning their work together for the fall, and in the fall the election of officers takes place. Immediately the officers go into office they can carry on; there is no hitch.

*Mrs. Corunyon:* But you can't legally do that; they are not elected, and you have no means of being certain that they will be elected.

*Mrs. H. Roy Van Ness:* They are not elected, they are nominated; but that does not stop them from planning the work for the fall with the present Executive Board.

*Mrs. Rogers:* I believe the objection to having the new officers installed in May is, or at least we found it so, the new officers went down to the Convention after they had been elected, and they were not in touch with the year's work, had not done the year's work, and the people who had been doing the work for the year were not permitted to read their reports. It was the new officers who read the reports of the work done by the old or retiring officers. This way, the people who do the work read their own reports at the Convention.

*President. Nevin:* I think that is a good point to bring out. Will you please repeat that?

*Mrs. Rogers:* The new officers who were elected in May would come down as the representatives of the county for the year's work, and the old officers would not be permitted to read the reports of the work they had done;

it would be the new incoming officers who would read the work done by the retiring officers.

*Mrs. Corunyon:* I see.

*Mrs. Rogers:* When you begin your work in October, then the people who have done the work give their reports at the Convention in June. That was, I think, the principal reason that motivated our changing our annual meeting from May to October.

*Mrs. Corunyon:* When do you have the opportunity to work up the next year's program?

*Mrs. Rogers:* In the way that Mrs. Van Ness explained.

*Mrs. Van Ness:* The new executive board meets with the old executive board, and together we, in Essex County, work out the ideas that are carried on during the summer and early fall. The combined boards work very well together. Then in the fall, after the election, because we have only 4 meetings a year, the President who is retiring conducts the election, and from that point on the new President takes charge of the work.

*Mrs. Corunyon:* I don't understand what you mean by the new executive board. There has been no election, so there is no new executive board.

*Mrs. H. Roy Van Ness:* I mean the new incoming officers, the nominees.

*Mrs. Corunyon:* You can't be sure they are going to be officers.

*Mrs. H. Roy Van Ness:* That is true.

*Mrs. Corunyon:* You are not legally correct in inviting the nominees into your Executive Board meetings.

*Mrs. A. Haines Lippincott:* I think it is a very fine thing to be able to work in such close harmony; however, you cannot take for granted that these people, because you have nominated them, are going to get in, absolutely. You have a provision for nominations from the floor, don't you?

*Mrs. H. Roy Van Ness:* Yes, but most times those people do get in. We only have 4 meetings a year, business meetings, and for that reason we allow the incoming officers to work with the outgoing officers before October. If we did not do that, it would take them until the January meeting to get organized. This way it works out perfectly.

*Mrs. A. Haines Lippincott:* I don't see how any officers can work until after election.

*Mrs. H. Roy Van Ness:* They do not vote, but they meet with the present Executive Board to consider ways and means, so that there may be no break.

*Mrs. A. Haines Lippincott:* You are taking a great deal for granted.

*Mrs. H. Roy Van Ness:* It works out. The new officers are not in office. The old officers are still in; but the President merely takes the chair for the election, and then the new President steps into her place.

*Mrs. E. R. Mulford:* I can see very readily the idea that the new President, not being in office long enough, if elected in May, to represent the county at the Convention in June, should not be the one to make the report of the work that has been done during the year. That would not give the county fair representation. However, as for our county, we never know until the immediate meeting just who our new officers are going to be. I, for one, could not begin to countenance such a plan. It would look as though the officers were hand-picked, chosen beforehand, which is certainly not right in a democratic organization. It looks as though everything were cut and dried, and the election a mere formality. To my mind, it smacks of graft, and seems to be an unfair thing as a policy.

*Mrs. H. Roy Van Ness:* When would you suggest that we have our annual meetings?

*Mrs. E. R. Mulford:* Now, don't get me as saying that I do not approve of the October meeting. I simply do not approve that we countenance having meetings of those persons, who *might* be chosen as officers, with the present Executive Board, because that is not fair. I do not believe it is right in a county to say 3 or 4 months beforehand, "We are going to elect this person as President or Vice-President". Nominations should be allowed to be offered from the floor; and if there is such a provision in the constitution, it should have some weight, and not be an empty gesture.

*Mrs. H. Roy Van Ness:* All right, then you can still have your election in October, or your annual meeting in October, and each individual county can fix it up to suit itself, the way to arrange it so that there may be no break, no long interval, between the 2 sets of officers. That will not bar the annual meeting in October, will it?

*Mrs. A. Haines Lippincott:* That is the time to have it.

*Mrs. H. H. V. Hubbard:* Couldn't we have our election of officers in our counties in the spring, in May, and have the annual meeting in October, and have them take office then?

*Mrs. Corunyon:* If I may be allowed to speak again?

*President Nevin:* Yes.

*Mrs. Corunyon:* Really, you have no authority to dictate to the counties as to when they should have their annual meeting. You have dictated February 15 as the date when our dues shall be in, but can't this matter be

left to the county organizations themselves? Does the state organization dictate the constitution of the county organizations?

*Mrs. A. Haines Lippincott:* May I speak on this?

*President Nevin:* Yes.

*Mrs. A. Haines Lippincott:* I might say that the National Constitution does some dictating here. It is quite interesting. It says (reading): "County auxiliary dues shall be sent to the State Treasurer" (you see they dictate to the county) "on the last day of the county fiscal year". It does not name the dates here, but that is dictating to the county, don't you think so? I really believe that in an organization of this kind there must be a coördination of the national, state and county auxiliaries, or we never can work this out; but I do want to say first of all that I do not think that officers that are to be elected at the October meeting should have anything to do with the running of the Auxiliary before they are elected.

*Mrs. H. Roy Van Ness:* They don't run it. They just attend the meeting of the Executive Board.

*Mrs. A. Haines Lippincott:* But they might not be elected. It is taking too much for granted.

*Mrs. H. Roy Van Ness:* That is entirely up to the county. We will not dictate that. However, that does not prevent you from having your meeting in October.

*Mrs. H. H. V. Hubbard:* May I ask Mrs. Lippincott if the National does any dictating about when the counties shall have their annual meetings?

*Mrs. A. Haines Lippincott:* No, but I might say that Camden changed its county constitution so that its annual meeting will come in October, so as to correspond with this.

*Mrs. H. H. V. Hubbard:* I see, but there is no bar to each separate county taking what method it pleases to work out this matter. It may be that some of the counties will have to change their constitutions a little to correspond with this new National and State change. However, I see no reason why this should not be left to the counties, and why it must be taken up at the state meeting. Naturally, I believe that each county will have in mind representation at the Convention by the officers who have performed the work of the previous year rather than by new officers who had nothing to do with the work.

*Mrs. H. Roy Van Ness:* We do not wish to dictate to the county auxiliaries; we merely wish to accomplish uniformity in the matter of these annual meetings. Often we send out notices to the officers in the county and then



receive word that new officers have been elected; that we have addressed the wrong persons. It is very annoying for the State Society not to have up-to-date records. Our Treasurers have found it especially difficult. If we all changed our officers in October, it would facilitate matters; and if the records were not sent in within a certain time, they could be requested, and we would know exactly where we were.

*Mrs. Kinch:* You have a state year book, haven't you?

*Mrs. A. Haines Lippincott:* That is our trouble; we should have.

*Mrs. Kinch:* Why not eliminate all this and leave it up to the county; simply insisting that the dues be in at a certain time from each county?

*Mrs. H. Roy Van Ness:* That is what we have been doing, and we get nowhere with it. When we sent out notices, we received word back from the County Treasurer: "I have sent you in our 1931 dues." They don't know whether they have paid the 1930 or 1931 dues because they pay them in May, for instance, and it confuses them.

*Mrs. E. R. Mulford:* Have we overlooked this fact that in changing our Constitution the President of a County Auxiliary is a delegate? However, if she is elected in May as a president of that County Auxiliary, she certainly will not know as much about her county as the one who has been serving during the year. I think that is the thing that is of paramount importance. That is the thing that Mrs. Van Ness wishes to get across to you. Therefore, it seems to me that if we here could get a vote, or indication, of feeling from the different representatives of each county as to whether they would be willing to go back and carry this message, all of the county meetings would conform with the state meeting because most women who have done any kind of organization work would prefer to have it organized properly and uniformly. Could we, therefore, have the motion?

*Mrs. Kinch:* What about those county societies which have already elected their new officers?

*Mrs. H. Roy Van Ness:* The officers they have elected could carry through until next October.

*Mrs. H. H. V. Hubbard:* The President of the United States, for instance, is elected in November, but he only takes office in March. That is my point. You can elect your officers in May, but they do not have to actually take office until October. In that way they can sit with your Executive Board and learn something about the working of the organization

through the summer months. I don't see why that can't be worked out.

*Mrs. A. Haines Lippincott:* The reason the Presidents of the United States were elected that way and did not take office until months afterward was on account of the fact that stage-coaches moved so slowly in the early days. However, we have different means of communication now. Therefore, why pattern ourselves on something that really belongs to a bygone age?

*Mrs. H. H. V. Hubbard:* But in this way they will have a chance to sit in with the present Executive Board until they take office, and it will avoid that in-between period. They will be able to line up their work during the summer months, and plunge into work in October. If you are elected in October, and are immediately put into office, then you cannot begin constructive work at that meeting. You have to look around and find out what conditions are, and that wastes a lot of valuable time.

*Mrs. A. Haines Lippincott:* If you have a President-Elect, she knows she is going to be the next President, and she has a whole year to work on her plans and to ascertain conditions. That is what each county should have to correspond with the State Constitution and the National Constitution.

*Mrs. H. Roy Van Ness:* In some counties the first vice-president moves up automatically. They have no president-elect, but it works out the same way.

*Mrs. A. Haines Lippincott:* I don't see that. Why not have a President-Elect? She is elected for the specific purpose of following the present president.

*Mrs. H. Roy Van Ness:* In some counties they have the first vice-president move up. The same thing is accomplished.

*Mrs. A. Haines Lippincott:* That does not correspond with your National.

*Mrs. Rogers:* Why not? It serves the same purpose.

*Mrs. A. Haines Lippincott:* If you are going to make your State Constitution correspond with the National Constitution, why don't you do it? The President-Elect of the A. M. A. is always the next president, and she has a full year in which to prepare her work.

*Mrs. H. Roy Van Ness:* We do that in Essex.

*Mrs. A. Haines Lippincott:* We do that in Camden. I suggest that we have a roll call of the counties and ask the delegates if they are willing to go back to their counties and ask them to have their annual meetings and elections in October and the fiscal year end on December 31.

*Mrs. H. H. V. Hubbard:* I wonder if we need to tell the counties when they are to have their elections provided the officers only take office in October. It seems to me that conditions in counties differ, and it might be more convenient for them to have their election at different times. Suppose you do have your President-Elect, and she knows a whole year before she takes office that she is going to be the next President, she does not know who is to work with her. That, it seems to me, is a pretty important point. I, for one, would like to take word back to Union that the state has requested that we have our annual meeting in October but that we can have our election of officers when we please in the county, and we can work that out to suit conditions.

*Mrs. George Culver:* You know that in Hudson County we have our election in May, but we send our outgoing president to the Atlantic City Convention, or wherever it may happen to be, as a delegate. The incoming president has nothing to do with that. However, the incoming president has a chance to come too and see what there is to learn, and unless you are elected in May you will not know where you are. If you are elected in May you can make all your plans during the summer as to what you are going to do in the fall. However, if you have your annual meeting in October, that is out of the question. It seems to me that the May election is so much more convenient.

*Mrs. Theodore Teimer:* But as Mrs. Lippincott said, even if you have elections in October, it is not sprung on you suddenly. You know that the President-Elect, or the First Vice-President in some of the counties, is going to take hold, and you know who she is, and she knows that she is going to be the next President a year in advance.

*Mrs. William Neer:* We don't seem to have any complications like that in Passaic County. We have a President, a First Vice-President, a Second Vice-President, a Treasurer and a Secretary. In May we appoint the Nominating Committee for the fall. That Nominating Committee will only nominate the First Vice-President as President and the Second Vice-President as the First Vice-President, and so on. Therefore, the First Vice-President will become President, and it is no news to her; she has known that right straight along. We succeed each other. The Second Vice-President becomes the First Vice-President, and it is no news to her; she has known that right straight along. They are prepared in the fall with a schedule of their proposed work. Therefore, when we have our meeting in October, and the Nominating Committee brings in its report, we know in advance what

is going to happen except as to the Treasurer and Secretary. If they want to change them, it is all right, but everything else goes along smoothly, and the new officers take office the first of January.

*Mrs. H. Roy Van Ness:* May I say that we might avoid this by providing that we have a President-Elect in each county. In that way we will conform to the State and National Constitutions.

*Mrs. W. S. Kilts:* But in the counties where they have no President-Elect and they have a First Vice-President, does it not answer the same purpose? Does the First Vice-President automatically succeed to the presidency?

*Mrs. A. Haines Lippincott:* That is the way it should be.

*President Nevin:* Mrs. Mulford said something that was very valuable, it seemed to me. I suggest that she repeat it.

*Mrs. E. R. Mulford:* This question came up at the Chicago Board meeting, and it was decided then that the President of a State Society, who is President at the time of the American Medical Convention, is the person who has power to act and sit in on those meetings. Therefore, it seems to me the counties would follow exactly the same way in relation to the state as the state does to the national. When we have our convention the person who is acting as President, and who has had the experience, should represent the county. If we want to conform to the National Constitution, I feel pretty certain that is the thing that we should do. I think my motion before covered it, that we should get the opinion of the counties.

*President Nevin:* I was not aware of the fact that it was put in the form of a motion; but it was beautifully expressed. Will you put it in the form of a motion now?

*Mrs. E. R. Mulford:* I move that we ask the representatives of the counties—because I suppose representatives from all of the counties are not here—to go back into their individual counties and recommend that, in order to make the State and County Auxiliaries conform, especially as to the constitutional requirement, each county have its annual meeting in October and its fiscal year end December 31.

*Mrs. H. H. V. Hubbard:* I second that motion.

The motion was unanimously carried.

*President Nevin:* May I, under the circumstances, introduce an outsider now? Miss Vanderveer, who is sitting in the back of the hall, is Chairman of the Committee on Child Hygiene, and she has something to say to us. I will, therefore, call on her to give her message to us as concisely as possible.



*Miss Vanderveer:* Through the courtesy of Dr. Sommer and Dr. Reddan, and especially your President, we have been permitted to put an exhibit on just opposite the Crystal Room where the general sessions are held. The exhibit consists of 6 life-sized dolls dressed in the costumes of different nations, which we thought would make it more interesting. A great deal of interest has been expressed in this exhibit so far. It is there to call attention to the State Department of Health's activities through its Child Hygiene Nurses. We have 146 nurses covering 400 communities. I am sure some of you are familiar with their work. We shall be glad to have you visit the exhibit, and any questions we can answer we will be very glad to do so.

*Mrs. George L. Orton:* May I call your attention to the fact, at this time, that Mrs. Clarke presented an emergency resolution, on which no motion was made? I would like at this time to make a motion that the resolutions as presented by Mrs. Clarke be adopted.

*President Nevin:* I beg Mrs. Clarke's pardon for not having gone through with that matter first.

*Mrs. Kinch:* I second the motion made by Mrs. Orton.

The motion was carried unanimously.

*Mrs. H. H. V. Hubbard:* May I ask that all the members of the Nominating Committee who are here now meet with me at the close of this meeting so we can arrange for a definite time to meet.

Announcement by Mrs. William Freile, regarding the dinner and dance, and the luncheon the next day in honor of Mrs. John McReynolds and the incoming and outgoing Presidents of the State Society and the State Auxiliary.

*President Nevin:* You have heard Mrs. Freile's remarks and I can do no more than emphasize that I hope you will come out in large numbers tomorrow to pay tribute to Mrs. McReynolds and our outgoing State Society President, Dr. Sommer, and the incoming President, Dr. Hagerty.

*Mrs. George N. J. Sommer:* Before adjourning, I think the members here ought to go on record as giving a vote of thanks to Mrs. James Hunter, Mrs. Edward Clarke and Mrs. H. Roy Van Ness, who are on the Legislative Committee, and who have labored over this revision of the constitution. They still have work to do, but they have given hours to the work, and a great deal of thought to it, and I think they deserve a vote of thanks at this time.

*Mrs. William Freile:* I second that motion.

The motion was carried, and the members of the Auxiliary arose.

*President Nevin:* If there is no further business to come before the meeting today, we will adjourn until tomorrow morning.

The meeting adjourned at 12.40 o'clock.

### Friday Morning Session

June 5, 1931

The meeting convened at 10.45 a. m., with Mrs. John Nevin, President of the Auxiliary, presiding.

*President Nevin:* The meeting will please come to order.

May I ask if there are any representatives here from Ocean County?

*Mrs. C. G. Weston:* Mrs. Disbrow was here yesterday.

*President Nevin:* She does not seem to be here today. Is Mrs. Bunnell here?

*Mrs. C. G. Weston:* I don't believe she is. I think they went home last night.

*President Nevin:* Is anyone here present from Passaic County?

Mrs. Morrow and Mrs. Tuers replied that they were both from Passaic County.

*President Nevin:* At this time I will ask Mrs. Hubbard to take the chair.

Mrs. H. H. V. Hubbard took the chair.

*Chairman Hubbard:* We will now have the President's report.

President Nevin presented her prepared report.

### State Auxiliary Executive Board

The New Jersey State Auxiliary Executive Board, over which I have had the privilege and honor to preside, has held 4 meetings during the past year. The first in Atlantic City immediately after the June Convention. The second, purely executive in scope, was held in October, in Jersey City. An open executive meeting in January and one in April. The 2 last, held in Trenton, were followed by delightful luncheons, the enjoyable details of which were planned by Mrs. George N. J. Sommer and her gracious and efficient Mercer County members. At each meeting the work of the Auxiliary was carefully discussed, the board keeping well in mind the desire for progress and achievement handed down to us by preceding officers. As your President, it has been my pleasure to take a personal part in Auxiliary meetings held in the following counties: Atlantic, Bergen, Essex, Camden, Union, Passaic, Ocean, Hudson—where I have had the honor to preside for 2 years—and Monmouth, where I had the extreme pleasure and satisfaction of reviving its dormant auxiliary. In all of these counties, I have found a splendid spirit of harmony and willingness to work prevailing, their varied and extensive line of activities having been presented to you by each county president.

My correspondence with the entire 21 counties has been large and continuous; much of it being directed toward influencing the smaller and weaker counties to carry on. Salem, refusing to be revived, because of its small and scattered membership; Cumberland County disbanding, be-

cause of a decided spirit of apathy and disinterestedness on the part of the physicians in that county. In this atmosphere of discouragement, the President, Mrs. Sewall, early last December loyally forwarded to me a check for \$10.75 balance in the treasury, which I held in abeyance for many months; offering repeatedly to go in person, help bolster up that organization, and return the check, but all to no avail. At the April Executive meeting it was voted to add it to the State Treasury. Sussex County withdrew early in the year, due to lack of interest among the members. In each of these counties there are capable, efficient women ready to carry on, with an abiding interest in Auxiliary work, if some encouragement be forthcoming from the physicians themselves, without which our Auxiliary cannot hope to be a success. In the face of these few withdrawals we have increased our paid-up membership percentage.

It has been difficult for me, as your President, to outline any specific type of work because of the fact that conditions in various counties differ so widely, but everywhere I have emphasized the value of keeping well informed; perusing carefully the study programs issued from time to time by our National Auxiliary, reading regularly our own New Jersey State Medical Society Journal, spreading the use of Hygeia Magazine, keeping in general touch with the work that is being done in our Health Departments as well as the Health Educational work that is carried on in our local schools, public and private; all this effort that we may equip ourselves for the day, which I feel is in the offing, when the Woman's Auxiliary as a whole will be assigned to some concrete work which will make us an asset to the medical profession.

Every Auxiliary has a direct responsibility as to the character of health information disseminated in the community and should be on the alert to forestall anything that might not savor of reliable instruction. Along these lines, the exposing of fraudulent advertising might well be considered an Auxiliary work. There are multitudes of people who accept as gospel the attractively gilded advertisements which confront us each day in our newspapers and magazines. Harmful, indeed, and a menace to unsuspecting readers. An united crusade against these fraudulent tactics would place each Auxiliary in a field of helpfulness worthy of its name.

May I express at this time my very deep appreciation of the help and gentle consideration that has been shown to me by my Executive Board during my administration. I fear that I have leaned heavily on you at times but I found you ever willing to lend your wise counsel. A year ago many of you were comparative strangers to me. Today, I look upon you as friends, in all which that beautiful word implies. With such cooperation on all sides, how can New Jersey's Medical Auxiliary do other than climb to heights of worth while achievement. Deo Volente—May the day be not far distant!

Faithfully yours,

Nellie D. Nevin.

*Chairman Hubbard:* You have heard the President's Annual Report. What is your pleasure?

*Mrs. George Culver:* I move that the President's report be accepted and filed.

*Mrs. Theodore Teimer:* I second that motion.

The motion was unanimously carried.

President Nevin resumed the chair.

*President Nevin:* It has been considered wise by the Executive Board to have the same Nominating Committee, with 1 exception, functioning for next year. The following is the Nominating Committee:

Mrs. H. H. V. Hubbard, Chairman

Mrs. A. J. Casselman

Mrs. D. Leo Haggerty

Mrs. William Neer.

On the desk are schedules of Mrs. Taneyhill's work for the coming year. I hope you will all come up before you leave and take one home in order that you may carefully consider it.

I also had a communication from Mrs. Lippincott last night asking me to impress it upon you to read carefully and study the papers that are sent out from time to time, relative to health and educational topics, by the National Board. She is a member of the National Board, and is much interested in this work.

*President Nevin:* May we now have the report of the Nominating Committee, Mrs. Hubbard, Chairman?

*Mrs. H. H. V. Hubbard:* The Nominating Committee takes pleasure in presenting the following ticket for election. The President, of course, is the President-Elect, who was chosen last year, Mrs. H. Roy Van Ness.

The President-Elect for this year is Mrs. Charles E. Adams, of Trenton, representing Mercer County.

First Vice-President, Mrs. Luther Hartman, of Maple Shade, in Burlington County.

Second Vice-President, Mrs. John F. Haggerty, of Newark, in Essex County.

Third Vice-President, Mrs. Andrew F. McBride, of Paterson, in Passaic County.

Corresponding Secretary, Mrs. George A. Rogers, of Newark, in Essex County.

Recording Secretary, Mrs. W. K. Campbell, of Long Branch, in Monmouth County.

Treasurer, Mrs. Edward Clarke, of Englewood, in Bergen County.

Directors for 3 years: Mrs. W. J. Duckett, of Jersey City, in Hudson County, and Mrs. F. A. Kinch, of Westfield, in Union County.

The remaining directors who have not yet completed their term of 3 years are: Mrs. Morrow, of Bergen County; Mrs. Freile, of Hudson; Mrs. Diverty, of Gloucester, and Mrs. Sommer, of Mercer.

*President Nevin:* Are there any further nominations from the floor?

*Mrs. A. L. Stilwell:* I move that the nominations be closed.

*Mrs. William C. Raughley:* I second that motion.



The motion was carried.

*Mrs. William C. Raughley*: I move that the Secretary pro-tem be instructed to cast a ballot for the election of the ticket as named by the Nominating Committee.

The motion was seconded and was carried.

*Mrs. John F. Hagerty*: The Secretary has cast the ballot, as directed.

*President Nevin*: The Secretary has cast a ballot for the names as presented by the Nominating Committee, and I now declare the following elected to office:

President, Mrs. H. Roy Van Ness.

President-Elect, Mrs. Charles F. Adams.

First Vice-President, Mrs. Luther Hartman.

Second Vice-President, Mrs. John F. Hagerty.

Third Vice-President, Mrs. Andrew F. McBride.

Corresponding Secretary, Mrs. George A. Rogers.

Recording Secretary, Mrs. W. K. Campbell.

Treasurer, Mrs. Edward Clarke.

Directors for 3 years:

Mrs. W. J. Duckett.

Mrs. F. A. Kinch.

The Directors remaining in office, whose terms have not yet expired are:

Mrs. Morrow.

Mrs. Freile.

Mrs. Diverty.

Mrs. Sommer.

May I ask each one of the newly appointed officers to rise? At the same time I wish to thank Mrs. Hubbard for her very wise discernment displayed in this selection.

The officers arose. (Applause.)

*Mrs. H. H. V. Hubbard*: May I ask that the officers and directors who are here meet me after this session in order that I may get their correct names and addresses so that the stationery may be printed correctly?

*President Nevin*: Is there any unfinished business that anyone wishes to bring up at this time? Any matters that should have the attention of the outgoing Board?

In handing over the gavel—I know that I voice your sentiments when I say that there is none more capable, or more worthy, than Mrs. Van Ness. I only ask for her, and beseech for her, that you give her the same generous coöperation that you have always accorded to me. With what the gavel represents, coupled with her efficiency, surely progress and success will follow.

I congratulate the Auxiliary on its new President. She has our loving wishes for her success. (Applause.)

*Mrs. Van Ness*: I esteem it a great privilege to become the President of this organization, and I thank you for the honor which you have conferred upon me.

Four years ago, when one of our Auxiliary members was asked to take an office, she remarked that she would not accept one until the organization amounted to something. I think she lost her best opportunity, because it is in the early years of growth and development that we may lay the foundation for the organization to be, and each one must do the duty which belongs to her, do it bravely, do it earnestly, and to the best of her ability. Few of us can do much. All of us can do something. We must not falter from tire. We must not halt from pique. We must not retire because of lack of proper recognition. But we must remember that "Never yet, share of truth was vainly set; in the world's wide fallow after-hands shall sew the seeds on hill and mead, shall reap the harvest yellow". (Applause.)

*President Nevin*: I congratulate the Auxiliary again on its choice. I want you all to become acquainted with our new officers and see them, and I know that under Mrs. Van Ness' leadership, harmony and progress will prevail. I am sure she will call upon you many times for your wise counsel because there never was a great leader who did not have to call on his soldiers, and I know that she will find you responsive in every way and helpful. I wish for you a very, very successful year. (Applause.)

Mrs. Van Ness took the chair.

*Mrs. Van Ness*: The new business to be brought up is the appointing of the Chairmen of the various Committees. I would like to make the following appointments:

Chairman of the Entertainment Committee, Mrs. O. W. Saunders, Camden, Camden County.

Chairman of the Publicity Committee, Mrs. George Culver, Jersey City, Hudson County.

Chairman of the Credentials Committee, Mrs. Maurice Chesler, Atlantic City, Atlantic County.

Chairman of Public Health Committee, Mrs. H. H. V. Hubbard, Plainfield, Union County.

Chairman of the Program Committee, Mrs. C. R. Kay, Peapack, Somerset County.

There is to be a very important meeting of the Executive Board in this room after adjournment of this meeting. Some very important matters are to be discussed, and we would like every Executive Board member to be present.

On motion, duly made and seconded, the meeting adjourned at 11.45 a. m.

*Luncheon Meeting*

June 5, 1931

The speaking commenced at 1.45 p. m., Mrs. John Nevin, President of the Auxiliary, acting as Toastmaster.

*Toastmaster Nevin:* Someone said—I think it was Emerson—that one's characteristics might be judged by the types who broke bread at their table. If this were so, I am sure our Medical Auxiliary can feel that it occupies a place of some distinction.

Today, we had hoped to have with us Mrs. McReynolds, through whose alert mind we exist at the present time. She was to have motored up from Dallas, Texas, and I presume may not be very far away, but we are sorry to say that she has not as yet reached here.

We claim, however, great distinction by our company to the right and to the left. Dr. Sommer, our New Jersey State Medical Society President, who has been our tried and true friend, I know has a word of greeting and I hope commendation for all. May I present Dr. Sommer?

*Dr. George N. J. Sommer:* Madam President and Ladies of the Auxiliary: We, Mrs. Nevin and I, are passing officers of the State Medical organization, but not until the session closes this evening will we be through with our jobs. Shortly after I became President of the State Medical Society I realized the needs of the Auxiliary. From what I could see the State Society had created an Auxiliary and then let this hopeful and sturdy infant shift for itself. I felt, in the main, that was a rather sad state of affairs, and I would, wherever I could, be a friend and adviser to it, and in my New Year's Greeting I promised the Auxiliary that I would be its steadfast friend.

I trust that in having finally succeeded in having the State Society order that an Advisory Council for the Auxiliary be formed, which will be appointed by my successor, the Auxiliary will no longer feel that it is like a ship adrift on an uncharted sea.

It has been a great pleasure for me to have known your President, who has in every way been helpful, and who in her charming manner has endeared herself to me personally as well as to my wife. (Applause.) Any woman who safely passes the other man's wife is well worth knowing. (Applause.)

In closing my administration I have nothing further to say save to ask the Auxiliary to remember the little slogan that I dug up somewhere in the records of the Auxiliary of the country: "The home, profession and public health." In those 3 words we can find an enormous field for real service

to the medical profession. I am not going to explain to you now what I believe those words mean in the life and the profession of medicine, and in the families of the doctors who are supported by the work of the profession.

Again, I repeat that it has been a great pleasure to have worked with the officers of this serious Auxiliary, and I know that Dr. Hagerty, my successor, will be a firm, true and steadfast friend to the Auxiliary.

*Toastmaster Nevin:* May I present the incoming President of the Medical Society of New Jersey, hoping that he will be as lenient to us and feel toward us as we do toward him, and regard us as we regard him, with a feeling of deep and loving respect. Dr. Hagerty! (Applause.)

*Dr. John F. Hagerty:* Madam President and Ladies of the Auxiliary: I am very happy indeed to meet you all in this very delightful way. It has been very nice to get to know you socially. I am coming to you, of course, in my official capacity as President of the State Medical Society, an office that carries with it very signal honor, but very great responsibilities, and I hope the Woman's Auxiliary during the course of the year will help me share, and help in every way to make my term of office a success.

I happen to come into office when your organization is having a rather troublesome time, but as so often happens the darkest hour is before the dawn, and therefore let us hope that is so in your case, and that the little troubles you have had have been straightened out to your satisfaction.

You have been informed, I think, and know of the committee that has been appointed, or will be appointed, to coöperate with the Woman's Auxiliary, to see if some way cannot be devised whereby we may use the potentialities of such a splendid body of women as you are. It is unfortunate that in the last 3 years something has not been found which would have been worth while for you to do. We know you are capable of doing good work, and we know that in this new committee which is being formed such work will be found, and that you will do everything satisfactorily which may be assigned to you.

I am extremely happy, as I said, to meet you, and I hope that the next year will make it possible for us to know each other better and better. (Applause.)

*Toastmaster Nevin:* May I present our newly elected President, whose efficiency and guidance and outstanding fairness will, I know, mean much in the line of achievement for our Auxiliary? It gives me very great pleasure to present Mrs. Van Ness, our new president. (Applause.)



*Mrs. H. H. V. Hubbard:* May I interrupt?

*Mrs. Van Ness:* Certainly.

*Mrs. H. H. V. Hubbard:* Madam President, Officers, Guests and Members of the Auxiliary of the New Jersey State Medical Society: It should be a great pleasure for me to do what I am going to do. It would be more than a pleasure, I assure you, if I felt in a condition, physically, to do it well, and had more ability to do it; but owing to the lateness of the hour at which I left the party last night, I feel that I may not be physically as fit as I might be, although I assure you it was not due to too great indulgence. Therefore, due to my limited ability, I ask you to bear with me while I do the best I can with the duty I am about to perform.

Down by the sea with the sunshine about us, and the sound of the ceaseless waves near us, we again pause for a moment to note the completion of another part of a journey on which our State Auxiliary has carried us since it was launched 4 years ago. Like the first ships sailed by men, it started its career with sails enthusiastically unfurled and under a charming and able captain. Gradually, as it journeyed on, the stress of travel, the waves, the wind, the storms have tried its structure, which has been improved and strengthened as fast as experience has shown us how to do it. No matter how well built, like a man without a woman, or a woman without a man, a ship without a rudder skilfully guided is a hopeless thing. So it is that this Auxiliary has sailed on so successfully, under the careful guidance of a succession of most worthy captains, charming women, who have expressed great individuality in their task of guiding us, but each one has strengthened the structure and added much to the morale of the crew.

It would be difficult to compare them or set the virtues of one administration against those of another. They were all so good; but that is not my task. It is my privilege today to try to express—and I find it hard to select words adequate to do it well—the esteem with which we hold our captain who has guided us so successfully this past year. There have been rocks and difficulties in our way, but no matter how narrow or twisted the channel she has guided us safely past the rocks, and we have sailed on.

The admiration and loyalty and love experienced this year as we have served as crew or passengers have been inspired by our most able president. She has proved to be one of the most gentle, clever, lovable and courageous presidents an organization could have. She has always been ready with the gracious word and gesture to meet any occasion.

As a small token of our esteem, it gives me

great pleasure to present this gift from the whole Auxiliary to Mrs. Nevin. (Applause.) May I ask that you set it in your home, and as you see it from time to time, it may remind you of the high esteem and love with which we hold you, because of your sterling qualities, displayed in service for us. (Applause.)

*Toastmaster Nevin:* Dear Madam Chairman: This very gorgeous gift fills me with mingled feelings of embarrassment and pleasure. I shall take great pleasure in using it always, and a still greater pride in the thought of your prized friendship that goes with it. Thank you again and again for your unswerving kindness to me. (Applause.)

*Mrs. Van Ness:* May I thank you for the honor which you have conferred upon me. It is a joy to serve you, and I wish to welcome now the members of the Executive Board as a whole, if they will please rise.

The members of the Executive Board arose.

*Mrs. Van Ness:* I am sure we are all very happy to know that the Advisory Board has been appointed, and we are looking forward to a very bright year working together.

*Toastmaster Nevin:* May I say, first of all, that we are indebted to our beloved Mrs. Freile for this very beautiful luncheon today. There is not anything that she touches that is not esthetic like her own loving nature, and I ask that we all give her a rising vote of loving thanks.

The audience arose and applauded.

*Toastmaster Nevin:* May I present an unexpected guest that we have today from Memphis, Dr. William T. Braun. Perhaps he will tell us something about the Auxiliary in Tennessee.

*Dr. William T. Braun:* I am pleased to be here. It is rather unexpected to be asked to talk, but it seems I have been drafted, and I am going to do the best I can. I am charmed with your lovely hostess, and I am going on my way to Philadelphia, to the convention of the A. M. A. there, happy to have been with you. It was very unexpected, my being here at this luncheon. It all came about through a chance remark I made to my old college friend, Dr. McMahon, of Morristown, New Jersey, this morning about our Woman's Auxiliary. As Mrs. Hubbard said, we men need our wives, and I know if mine were here she could tell you all the details about our work in Tennessee. I am not well acquainted with all the activities, but I do know it is full of pep down there, and the Auxiliary is coming along fine. Just to give you an example, the women determined to have a students' loan fund, and in order to get it they established a tea room, and in the course of

3 weeks they made \$1000. We thought that was very good, and they worked in this tea room coöperatively. It was great fun to see the doctors' wives working around there with their little pink aprons and little caps, each one doing her share of the work. They pay for their lunch too. No free meals are allowed even to members.

Another thing, while I know all the doctors, I was surprised how little acquainted I

was with the doctors' wives, and this affords an excellent opportunity for us to meet, in order that we may coöperate in the wonderful work which we must do for the community. (Applause.)

*Toastmaster Nevin:* I think we will adjourn now, and I hope that many of us will be free to see Dr. Hagerty inducted into office. Thank you!

The meeting adjourned at 2.45 p. m.



## MEETINGS OF THE COUNTY SOCIETIES

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**Atlantic County.**—Meets second Friday evening monthly, except in June, July, August and September. Annual Meeting in November.

**Bergen County.**—Meets on second Tuesday each month, except July and August. Annual Meeting in January.

**Burlington County.**—Meets second Wednesday afternoon of January, March, May, September and November. Annual Meeting in November.

**Camden County.**—Meets first Tuesday in each month, October to May inclusive, with an outing on second Tuesday in June. Annual Meeting in October.

**Cape May County.**—Meets on first Tuesday in April and October. Annual Meeting in October.

**Cumberland County.**—Meets on the second Tuesday of January, April, July and October. Annual Meeting in October.

**Essex County.**—Annual Meeting is the first Thursday in October. Other meetings on the second Thursday of each month, November to May, inclusive, on call of the President.

**Gloucester County.**—Regular meetings on the third Thursday of each month, October to June, inclusive. Annual Meeting in November. Annual Social Session in September.

**Hudson County.**—Meets first Tuesday evening of each month, October to May, inclusive. Annual Meeting in October.

**Hunterdon County.**—Meets on the fourth Tuesday of January, April, July and October, the latter being the Annual Meeting.

**Mercer County.**—Meets on the second Wednesday of each month, except July, August and September, at 8:30 p. m., in the Carteret Club

at Trenton. Annual Meeting in December. Annual Banquet in November.

**Middlesex County.**—Meets on the third Wednesday afternoon of each month, September to June inclusive. Annual Meeting in December.

**Monmouth County.**—Meets on the last Wednesday in each month from October to June inclusive. Annual Meeting on the Tuesday after the first Monday in December.

**Morris County.**—Meets on the second Tuesday in March, June, September and December. Annual Meeting in September. Special meetings (1-3 yearly) for additional scientific discussions arranged by Executive Committee.

**Ocean County.**—Meets in May and November as called by the Secretary. Annual Meeting in November.

**Passaic County.**—Meets on the second Thursday evening of each month, except June, July and August. Annual Meeting in October.

**Salem County.**—Meets on the second Wednesday in February, April, October and December. Annual Meeting in October.

**Somerset County.**—Meets on the second Thursday afternoon in February, April, June, October and December. Annual Meeting in October.

**Sussex County.**—Annual Meeting on the second Tuesday in September; other meetings bi-monthly, September to May inclusive.

**Union County.**—Meets on the second Wednesday of January, April, July and October. Annual Meeting in October.

**Warren County.**—Meets on third Tuesday of January, April, July and October; the last named being the Annual Meeting.













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